2000

**Sense of Belonging and Self-Esteem: What are the Implications for Educational Outcomes of Secondary School Students? : A Literature Review**

Lynne Strudwicke  
*Edith Cowan University*

Follow this and additional works at: [https://ro.ecu.edu.au/theses_hons](https://ro.ecu.edu.au/theses_hons)

Part of the Educational Psychology Commons

**Recommended Citation**


This Thesis is posted at Research Online.  
Edith Cowan University

Copyright Warning

You may print or download ONE copy of this document for the purpose of your own research or study.

The University does not authorize you to copy, communicate or otherwise make available electronically to any other person any copyright material contained on this site.

You are reminded of the following:

- Copyright owners are entitled to take legal action against persons who infringe their copyright.

- A reproduction of material that is protected by copyright may be a copyright infringement. Where the reproduction of such material is done without attribution of authorship, with false attribution of authorship or the authorship is treated in a derogatory manner, this may be a breach of the author’s moral rights contained in Part IX of the Copyright Act 1968 (Cth).

- Courts have the power to impose a wide range of civil and criminal sanctions for infringement of copyright, infringement of moral rights and other offences under the Copyright Act 1968 (Cth). Higher penalties may apply, and higher damages may be awarded, for offences and infringements involving the conversion of material into digital or electronic form.
USE OF THESIS

The Use of Thesis statement is not included in this version of the thesis.
Sense of Belonging and Self-Esteem: What are the Implications for Educational Outcomes of Secondary School Students?

A Literature Review

Lynne Strudwicke
A Thesis Submitted in Partial Fulfillment of the Requirements for the Award of Bachelor of Arts (Psychology) Honours.
Faculty of Community Studies, Education and Social Sciences
Edith Cowan University
Date of Submission: 30 October 2000
Declaration

I declare that this thesis is my own work and does not incorporate, without acknowledgement, any material previously submitted for a degree or diploma in any institution of higher education and that, to the best of my knowledge and belief, it does not contain any material previously published or written by another person except where due reference is made in the text.

Lynne Strudwicke
Acknowledgements

I would like to offer sincere thanks to my supervisor Dr. Neil Drew for his expertise, guidance and tireless support throughout the year. I would also like to acknowledge Mr. Ross Oliver of SEMYA for introducing me to the relevant officers in the schools I attended. Thanks to Alison Parolo for her guidance in formulating the General Questionnaire. Thank you to my partner in life, Geoff, for his constant understanding, endless support and devotion. Thank you also to my dear children Renae, Alex and Tristan for their patience and understanding when I was sometimes unavailable and for their unceasing confidence in my ability. This thesis is dedicated to my dear mother Belle (deceased), whose nurturing and encouragement of my curiosity for life, has ultimately brought me to this point.
Format
This thesis has been prepared in two parts, a literature review and a research report.

Each part has been prepared in APA format. The research report is intended for submission to a relevant journal, although one has not been nominated at the time of writing.
# CONTENTS

**SENSE OF BELONGING AND SELF-ESTEEM: WHAT ARE THE IMPLICATIONS FOR EDUCATIONAL OUTCOMES OF SECONDARY SCHOOL STUDENTS?**

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>LITERATURE REVIEW</td>
<td>I</td>
</tr>
<tr>
<td>DECLARATION</td>
<td>II</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>III</td>
</tr>
<tr>
<td>FORMAT</td>
<td>IV</td>
</tr>
<tr>
<td>CONTENTS</td>
<td>V</td>
</tr>
<tr>
<td>TABLES LIST</td>
<td>VI</td>
</tr>
<tr>
<td>ABSTRACT</td>
<td>VII</td>
</tr>
<tr>
<td>INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>FACTORS ASSOCIATED WITH STUDENTS AT EDUCATIONAL RISK</td>
<td>4</td>
</tr>
<tr>
<td>SCHOOL FACTORS</td>
<td>4</td>
</tr>
<tr>
<td>RELEVANCE OF THE CURRICULUM</td>
<td>5</td>
</tr>
<tr>
<td>FRIENDS AND PEER INFLUENCE</td>
<td>7</td>
</tr>
<tr>
<td>FOCUS ON ACHIEVEMENT</td>
<td>8</td>
</tr>
<tr>
<td>SCHOOL MEMBERSHIP AND SENSE OF BELONGING</td>
<td>11</td>
</tr>
<tr>
<td>THEORY OF SCHOOL MEMBERS</td>
<td>12</td>
</tr>
<tr>
<td>SENSE OF BELONGING</td>
<td>14</td>
</tr>
<tr>
<td>MOTIVATION AND SENSE OF BELONGING</td>
<td>15</td>
</tr>
<tr>
<td>DETRIMENTAL EFFECTS OF ALIENATION</td>
<td>16</td>
</tr>
<tr>
<td>SELF-CONCEPT AND SELF-ESTEEM</td>
<td>17</td>
</tr>
<tr>
<td>THE WORK OF SUSAN HARTER</td>
<td>18</td>
</tr>
<tr>
<td>COMPETENCE AND MASTERY</td>
<td>21</td>
</tr>
<tr>
<td>MOTIVATION AND SELF-ESTEEM</td>
<td>22</td>
</tr>
<tr>
<td>SELF-DETERMINATION THEORY</td>
<td>24</td>
</tr>
<tr>
<td>SCHOOL ENGAGEMENT</td>
<td>26</td>
</tr>
<tr>
<td>FIGURE 1. ALTERNATIVE PATHWAYS</td>
<td>28</td>
</tr>
<tr>
<td>PREVENTION AND INTERVENTION</td>
<td>29</td>
</tr>
<tr>
<td>THE CURRICULUM</td>
<td>29</td>
</tr>
<tr>
<td>CARING SCHOOL COMMUNITIES</td>
<td>30</td>
</tr>
<tr>
<td>ASSESSMENT</td>
<td>31</td>
</tr>
<tr>
<td>FUTURE DIRECTIONS</td>
<td>32</td>
</tr>
<tr>
<td>CONCLUSION</td>
<td>33</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>34</td>
</tr>
</tbody>
</table>
Tables List

Table 1. – page...78
Mean Sense of Belonging for Three Groups of Intention; Leave Before Year 12, do a WSA or TEE Course.

Table 2. – page...79
Factorial ANOVA (Intention x Gender) Results for Sense of Belonging, Self-Worth and Eight Dimensions of Self-Concept.

Table 3. – page...80
Mean Self Perception Profile for Adolescents Scores for Three Groups of Intention on Nine Dimensions of Self-Concept

Table 4. – page...81
Mean SPPA Scores for Gender on Nine Dimensions of Self-Concept.

Table 5. – page...82
Correlation’s for Sense of Belonging and Self-Concept for Three Groups of Intention

Table 6. – page...83
Correlation’s for Self-Worth and Eight Dimension of Self-Concept for Three Groups of Intention
Abstract

In this technological era a complete secondary education is more important than ever. Therefore, this review examines the issues surrounding students’ at risk of dropping out of school. School factors such as the relevance of the curriculum, support, and also methods of assessment have each been associated with the dropout issue. These factors may also impact on students’ sense of belonging, self-concept and self-esteem in negative or positive ways. Sense of belonging is a fundamental need. In schools it has been found to relate directly to achievement, indicating that mainly higher achieving students benefit from having this need fulfilled. Sense of belonging also seems to be related to self-esteem, since both are contingent on approval or support from others. Therefore students who do not get their belonging needs met may also have lower self-esteem. Ultimately these processes may influence students’ decision to stay at school. In the past there has been no empirical evidence of this, therefore further investigation of these important issues is recommended. Ways to enhance students’ educational and psychological outcomes are within caring school communities, using procedural rather than outcome focused assessment methods and the introduction of a broad and relevant curriculum. In Western Australia the Curriculum Council is aware of students’ changing needs, and is initiating changes that will enhance their goals for the future and also their psychosocial well being.

Author: Lynne Strudwicke
Supervisor: Dr Neil Drew
Submitted: 30 October, 2000
Sense of Belonging and Self-Esteem: What are the Implications for Educational Outcomes of Secondary School Students?

Student retention rates are an important issue today, since much higher education standards are required within the work force, than have ever been required in the past. These changes are reflective of the dynamic 'technological age' we now find ourselves in, where computers are as commonplace in the home as they are at work. Training is constantly changing to keep abreast of these advances, where even unqualified employment positions are likely to involve sophisticated equipment and therefore require greater knowledge.

Schools today, also reflect these changes. In Western Australia there has been a big push to equip schools with computers, Internet access and other sophisticated technologies. However, the education process has been much slower to incorporate change into traditional learning areas. This means students may be disadvantaged by outdated teaching methods (Battistich, Watson, Solomon, Lewis & Shaps, 1999; Covington, 1992, 2000; Wehlage, Rutter, Smith, Lesko & Fernandez, 1989) that discourage them from full participation in school. These consequences may not only disadvantage adolescents' future prospects for employment, but also impact on their personal well being by failing to meet fundamental psychological needs for belonging, (Battistich et al., 1999; Goodenow, 1993a; Wehlage, et al.,1989) autonomy and competence (Connell & Wellborn, 1991; Covington, 1992; Ryan & Deci, 2000). The ultimate outcome may be students who feel alienated from the system and leave school early.

Contemporary education is outdated in two important ways (Letgers & McDill, 1994; Wehlage et al. 1989). Firstly in high schools, the inclusion
of arts and science subjects in a mostly traditional curriculum, is geared to students wanting to enter university. This was very appropriate up until around the 1980s, since the majority staying to year 12 wanted to enter university. Today however, there is an expectation for most students to finish school after Year 12. Those who consider staying on, but do not want to go to university may find a strictly academic course has little meaning for their future goals and therefore find it difficult to commit themselves (Carnahan, 1994, Wehlage, et al., 1989).

A second education issue that remains from the past is the way students are assessed. Giving students a grade of ‘A’, ‘B’ or ‘C’ is a convenient and meaningful way for teachers to know the level of students’ acquired knowledge. However it may have very different implications for students. Students can interpret grades as an evaluation of themselves, rather than just their schoolwork (Covington, 1992, 2000). Only a few get high marks, since the majority will only have average ability (Harter, 1996b). Therefore not many students receive positive effects from assessment of their schoolwork (Harter, 1996b), and the rest can feel discouraged and alienated by perceived attacks on their self-esteem (Covington 1992).

The purpose of this review therefore is to examine and assess influences that may have a bearing on students’ educational outcomes, with particular emphasis on factors effecting students at educational risk, who either dropout or fail to attain adequate educational standards. It has been recognised that social factors outside the school are often associated with academic failure and dropout (Carnahan, 1994; Janosz, LeBlanc, Boulerice & Tremblay, 1997; Wehlage et al., 1989). However, it appears issues within
Belonging and Self-Esteem 3

the school are most crucial for students’ educational and psychological outcomes (Janosz et al., 1997; Wehlage et al., 1989).

Wehlage et al., (1989), determined school factors to be the most critical variables, after an extensive ethnographic study of 14 specialist high schools for students with poor academic histories. In another study, two generations of adolescents (n = 791) between 12 and 16 years were surveyed by Janosz et al., (1997) in 1974 and 1985, to determine the most powerful predictors of school drop out. Although there were a range of social and personal variables, school factors including achievement and commitment, were found to provide the most reliable prediction of potential dropout. Therefore, although other factors are associated with dropout and academic failure this review will mainly focus on issues within the school of both a theoretical and empirical nature.

A brief overview of the range of variables associated with school dropout will be reported. Following this issues within the school will be discussed at greater length, including the appropriateness of the curriculum and the effects of traditional methods of assessment. These are both of particular importance to students’ educational outcomes (Battistich et al., 1999; Covington, 1992; 2000; Curriculum Council, 1999; Harter, 1996; Ryan & Deci, 2000). The way grades impact on sense of belonging (Covington, 1992; Goodenow, 1993, Deci & Ryan, 2000) self-concept, self esteem (Harter, 1996), motivation (Covington, 1992; 2000; Harter, 1996; Ryan & Deci, 2000), and school engagement (Finn, 1993; Wehlage, 1989) will also be reviewed. Finally contemporary perspectives will be examined, with suggestions for future research into this important issue.
Factors Associated with Students at Educational Risk

Students at educational risk are those whose academic achievement is considered inadequate and below school standards, and who may leave school before completing their education. As noted earlier, research has identified three main factors associated with students at educational risk. Firstly, social and family background. At risk adolescents are more likely to be in families of low SES, and to have single, divorced or remarried parents and to belong to an ethnic minority (Carnahan, 1994; Finn, 1993; Janosz et al., 1997; Wehlage et al., 1989). In Australia, there is clear indication that indigenous people are at greater risk (Education Department of Western Australia, 1997). The second factor is personal problems, such as mental and physical health problems, substance abuse, pregnancy, learning disabilities, legal difficulties or trauma from divorce or death in the family (Wehlage, et al., 1989). Other personal problems are being in a large family, having parents who dropped out of school or have been jailed (Carnahan, 1994). Lastly, school factors such as truancy, academic failure, suspension and disciplinary problems have all been found to be closely related to students dropping out (Carnahan, 1994; Connell & Wellborn, 1991; Finn, 1993; Janosz et al., 1997; Wehlage, et al., 1989). It is important to note though, that the causal nature of these relationships has not been definitely established. Each of these areas is worthy of consideration. However, as the school is an important point of intervention and where most contemporary research is focused, the remainder of this review will address school related issues.

School Factors

While three broad factors of social, personal and school problems can
be used to identify which students are most likely to be at educational risk, they do not explain why some students fail to achieve a satisfactory education. Wehlage et al. (1989), observe that students “don’t fail simply because they are black or poor or pregnant or from a single-parent home” and found low grades could not necessarily be attributed to low ability (p.50). Wehlage et al. (1989), tested students at a specialist high school for adolescents with poor academic records. Those who had a history of recurrent course failure were tested for reading and maths ability. The majority answered over two thirds of questions correctly (Wehlage et al., 1989). Similarly when Janosz et al. (1997), investigated predictors of dropout among 800 white, French speaking adolescents, it was found up to 40% of dropouts were in fact committed to school and were not classed as underachievers. The commitment measure included, attitude to school, perceived competence, importance of success and educational aspirations (Janosz et al., 1997). Since students appear to be academically capable, these findings suggest schools are not successfully motivating students to participate in the curriculum. High rates of absenteeism are associated with poor academic performance, but they also indicate the failure of schools to engage students (Carnahan, 1994; Connell & Wellborn, 1991; Wehlage et al., 1989). A narrow, highly academic curriculum and forms of assessment that impact negatively on students’ self-perception may contribute to disengagement from school.

Relevance of the Curriculum

Dissatisfaction with school has been cited as the most prevalent reason for students dropping out or disengaging from school (Hymel, Comfort, Schonert-Reichl & McDougall., 1996). Engagement refers to the
willingness and degree of participation in school related activities (Finn, 1993). Wehlage et al., (1989) identified several impediments to educational engagement derived from the education system. These were an absence of extrinsic reward, a narrow conception of school learning and coverage of a superficial curriculum. An absence of extrinsic reward is perceived because learning is not meaningful (Hymel et al., 1996; Wehlage, 1989). This view is supported by Battistich et al., (1999) who believed “many students are alienated from school and see little or no value in working hard to get an education” (p.416). Students are not interested in knowledge for the sake of it, rather students want schools to provide them with courses that direct them into post-school options that will result in real vocational outcomes (Curriculum Council, 1999). Therefore, there is a need for schools to develop academic and vocational curricula that directly connect adolescents to employment and other post secondary options. Students are more likely to be motivated if they interpret their education as meaningful and relevant to their adult lives.

This view is supported by the Curriculum Council (1999), in Western Australia, who found the argument that a largely academic curricula will provide students with a broad education, is invalid. Instead it rather narrowly caters for the minority who intend to proceed to university. “Most subjects place little value on the individual as a social or co-operative being ... or on the practical application of knowledge” (Curriculum Council, 1999, p.3). A strictly academic curriculum fails to address the societal values that are required to take ones place as a citizen, parent or worker. Wehlage et al., (1989) advocates that all adolescents have common needs which include a personal sense of competence and success, to develop a sense of identity
and to acquire socially useful knowledge and skills. Thus the present curriculum may fail to meet students’ future needs both in the workplace and as citizens. Therefore it may be difficult for students to commit to years of academic effort, if they perceive it will ultimately be of little benefit to them in their future lives.

Friends and Peer Influence

Adolescence is a time when friends are particularly important and when their influence may be strategic in either negative or positive ways (Goodenow, 1993; Hymel et al., 1996). Therefore the influence of friends and peers on students’ academic motivation has been considered as a possible determinant of levels of school participation. With this in mind Goodenow (1993) investigated 301 urban, high school students’ sense of belonging (SoB) and beliefs about their friends’ values. It was anticipated SoB and beliefs would be related to aspects of school motivation that included valuing schoolwork, effort and expectancy of success. However only a weak correlation between peer influence and school measures emerged from the analysis. Likewise a review by Hymel et al., (1996) revealed students were most likely to be affiliated with other at risk students who didn’t value school or who dropped out, although they were not influenced by them. Rather at risk students were likely to be associated with similar others because their negative orientation to school was like their own and so was supportive. Therefore, they had not been persuaded or influenced by them to adopt that orientation (Hymel et al., 1996).

Wentzel (1998) did find some evidence that peer support is related to school outcomes when she investigated 167 sixth grade students. Perceived support from peers was related to interest in school and pursuit of prosocial
and social responsibility goals. However, consistent with Hymel et al., (1996), it was not related to school motivation goals or academic achievement. Therefore although friends and peers are an integral part of school life and significant in a social sense, they do not appear to greatly influence students values about school or the degree of their engagement.

**Focus on Achievement**

One element found to be relevant to educational outcomes is the way schools focus on achievement. Whilst this may seem appropriate, since low achievement is a defining factor of students at educational risk, current methods of grading students reward only the minority. When students talents and abilities remain unacknowledged they are likely to “defend their dignity by rejecting the legitimacy of educational engagement” (Wehlage et al., 1989, p.179). Focusing on academic grades rewards only a few students who achieve well, while the rest are may be unmotivated by negative feedback (Covington, 1992, 2000; Finn, 1993). In this regard teachers may have a major impact on students since, they communicate specific approval and disapproval for scholastic achievement, in the form of grades (Harter, 1996b; Wentzel, 1998). Even when children are motivated and do improve they are still unlikely to rank at the top, since most students are average (Harter, 1993). Therefore only a few students will get top grades, or ‘As’ which is one of the greatest reward schools offer for academic achievement in the classroom. Students who get a second best ‘B’, third best ‘C’ or worse for their work, may feel their work is regarded as substandard despite their care and effort. Therefore a negative response in the form of a lower grade may reinforce non-participatory behaviour.

Grades are extremely pertinent to both students’ motivation and also
their self-worth (Covington, 1992, 2000; Covington & Teel, 1996). When Harter (1996b) surveyed children from third to ninth grades to investigate motivational patterns, she found that mean scores on a motivation measure declined systematically, reaching the lowest point in ninth grade. At the same time it was also found that motivational orientation changed from intrinsic in primary school, to extrinsic in high school when there is a stronger focus on academic achievement (Harter, 1996b). Goodenow (1993b), also found motivation dropped significantly from sixth to eighth grade, corresponding with a drop in support. These changes in motivation represent an inverse relationship to a progressively greater emphasis on academic performance in higher school years. That is, as the importance of academic achievement (grades) increases, intrinsic motivation decreases. One explanation is that students equate competency with outperforming others (Covington, 2000). This reasoning instills a fear of failure, which leads to defensive behaviours such as reduced effort. “Effort becomes a double edged sword valued by students because teachers reward it, yet also feared by students for its potential threat to their sense of worth when anticipating failure” (Covington, 2000, p. 9). Students can blame failure on low effort, rather than their own ability (Covington, 2000).

Roeser et al. (1996), believed school policies of rewarding the most academically able, often contributes to the development of students’ academic goal structures. Schools may reward high achieving students by having public honour rolls, grouping students according to ability, awarding special privileges based on academic standing and having separate report card marks for achievement and effort (Roeser et al., 1996). Although these incentives are intended to motivate students to strive for excellence, they
may have the reverse effect and simply foster competition amongst peers instead (Covington, 1992; Harter, 1993). If students perceive that demonstrated ability is the primary focus of the school, they must compete against their peers to be rewarded with higher grades and the kudos that attends them. “These comparisons can have devastating psychological effects for a number of students” (Harter, 1996b, p.15). Harter (1993) reported that children in their usual class setting could ‘rank order, with great precision, the competence level of every member of their class’ (p.94). Unless their grades keep them within the top few percent, these circumstances may lead to frustration and apathy (Deci & Ryan, 2000; Harter, 1996b); knowing they can’t ‘win’ the school game (Covington, 1992, Covington & Teel, 1996). If only high achievement is rewarded, effort, improvement and task mastery can be ignored, providing negative reinforcement for these attributes (Covington, 1992, 2000; Roeser et al., 1996).

Students are therefore, faced with several school related problems that can impede their engagement within the school. Firstly, by offering students a curriculum that is mainly academic, those not intending to go to university may find little point in striving to learn subjects that will have little relevance or benefit for them, when they leave school (Curriculum Council, 1999; Wehlage, et al., 1989). Secondly, if only successful students get recognition from teachers, this can motivate non-participatory behaviours in others (Covington, 1992, 2000; Harter, 1996b; Ryan & Deci, 2000). Also if achievement is a primary focus, less successful students may feel devalued and alienated, especially if they are experiencing difficulties that are ignored by the school. The task then, of successfully engaging students, lies
very strongly within the education system and the school.

**School Membership and Sense of Belonging**

A construct relating to students’ educational engagement and success is that of school membership (Battistich et al., 1997, 1999; Finn, 1993; Goodenow, 1993a; Voelkl, 1995), recognised by Wehlage et al. (1989), as a requirement that schools must take responsibility for. An integral component of school membership is belonging, which has been identified as a fundamental need. Maslow (1970) was among the first to identify the importance of belonging in his hierarchy of needs, ranking its importance above the needs for safety and security. Although Maslow’s need hierarchy has found little empirical support over the years (Reeve, 1992), the notion of a need for belonging has consistently reappeared within the domain of psychology.

In community psychology, Sense of Community (SoC) is a central concept. The first of four important elements of SOC is membership, which is a feeling of belonging and personal relatedness (McMillan & Chavis, 1986). Again, after an extensive review of the empirical literature, Baumeister and Leary (1995), concluded that “the need to belong is a powerful, fundamental and extremely pervasive motivation” and ranked its importance akin to that for food (p.497). They also derived evidence that pathological consequences of a medical, psychological and behavioural nature are probable, when belonging needs are not met. Also in a new theoretical model of the development of self, Connell and Wellborn (1991) identified relatedness as one of three fundamental needs which include competence and autonomy. Relatedness is defined as encompassing “the need to feel securely connected to the social surround and the need to
experience oneself as worthy and capable...” (Connell & Wellborn, 1991, p.51). Finn’s (1993) term of identification in the school context, includes the degree to which students feel they belong in the school setting. Likewise, Goodenow (1993), refers to sense of belonging (SoB) as “the extent to which students feel personally accepted, respected, included, and supported by others in the school environment” (p.80). Belonging is also identified as a critical variable in the literature on school dropout (Hymel et al., 1996). Therefore it can be concluded that a sense of belonging is an extremely important and fundamental need that impacts on students’ well being within the social setting of the school.

**Theory of School Membership**

Wehlage et al.’s (1989), theory of school membership is based on nearly a decade of research of at risk students and addresses the need for belonging in an atmosphere that accepts, respects and values all students. Integral to this theory are four conditions of social bonding that include attachment, commitment, involvement and belief. Each of these will be discussed briefly.

*Attachment* refers not only to social and emotional ties to others, but also to caring about others’ perceptions and expectations of self. If attachment is weak, students feel teaching staff do not care about them and respond by not participating in class and possibly displaying disruptive behaviour (Wehlage et al., 1989).

*Commitment* relates to personal goals and is expressed by complying with school requirements and demands in order to achieve a desired outcome. However “commitment may be difficult to engender among those who see a bleak future for themselves even if they graduate” (Wehlage, et
al., 1989, p. 117). This happens as previously discussed, when schools offer a restrictive and mainly academic curriculum that fails to facilitate entry into the workforce (Battistich et al., 1999; Curriculum Council, 1999).

The third bonding element Wehlage et al., (1989) identified was involvement, which refers to students engagement in school activities and is synonymous with Finn’s (1993), idea of participation. Unmotivated students remain passive, experience boredom and drop out psychologically, which may in turn be followed by actual dropout (Wehlage, et al., 1989).

The last vital aspect of social bonding is belief in the institution as a legitimate and effective establishment without which, social bonding will fail (Wehlage, et al., 1989). Therefore Wehlage et al., (1989), theory of school membership encompasses students’ needs for a caring environment where they are accepted, respected and valued regardless of accomplishment and where they can attain successful links to their future lives.

Wehlage et al. (1989) found students with no personal relationship with teachers or who had regular conflicts with adults were those at greatest risk of dropping out. A similar effect was reported in a study of 296, 8th grade students, by Roeser, Midgley and Urdan (1996), who found support for their hypothesis that the quality of teacher-student relationships is related to feelings of belonging. This in turn was associated with students’ psychological and behavioural functioning within the school. Specifically, the perception of positive relationships promoted feelings of belonging that predicted positive school-related affect. Feelings of belonging and academic efficacy were also related to final semester grades (Roeser et al., 1996). It was concluded that the perception of school as a caring, supportive
environment that emphasised individual effort and progress, resulted in feelings of belonging and positive school oriented affect (Roeser, et al., 1996). Although it was also evident that the relationship between belonging, efficacy and grades does not benefit all students. While high grades corresponded with greater feelings of belonging, low grades were associated with a lower sense of belonging. A sense of belonging within the school is crucial to promote the psychological and educational well being of all students not just those at the top end of the achievement scale.

**Sense of Belonging**

Although academic achievement is frequently associated with a *sense of belonging* (Goodenow, 1993a, 1993b; Goodenow & Grady, 1993; Roeser et al., 1996; Voelkl, 1997), no studies to date have established a causal relationship. Do feelings of acceptance and belonging within the school enhance academic achievement, or is it the other way around? There are indications that achievement may precede feelings of belonging. Voelkl (1997), was interested in determining the processes that lead to student’s identification or disidentification from school. The term of *identification* adopted from Finn (1993), is defined as “a sense of belonging and valuing school and school-related outcomes” (p.294). Longitudinal patterns of academic achievement and classroom participation were studied in 1,335 white and African-American eighth grade students. Students with both high academic achievement and participatory classroom behaviours were those most likely to *identify* with school, while those with low achievement and little participation were more likely to feel alienated (Voelkl, 1997). Those who had higher achievement, participation and identification in fourth grade, displayed the same pattern in later grades, although the relationship
to identification became stronger. These findings indicate students who achieve well, are academically motivated because their high grades lead to acceptance and respect from teachers, which result in feelings of belonging. Thus, school membership or a sense of belonging appears to form an essential basis on which to establish the goals of academic achievement and personal and social development.

**Motivation and Sense of Belonging**

Because belonging has been found relevant to motivation it is thought to be a critical factor relating to the participation and retention of at risk students (Connell & Wellborn, 1991; Goodenow, 1993a). To investigate the importance of SoB in schools, Goodenow (1993a) developed the Psychological Scale of School Membership (PSSM). Preliminary trials of the PSSM with 301 urban high school students reinforced the importance of belonging and interpersonal support. School belonging was significantly and more strongly related to expectancy of success, valuing of schoolwork, effort and general school motivation (Goodenow, 1993b; Goodenow & Grady, 1993). In a subsequent study after refinement of the PSSM to a shorter scale, 700 sixth to eighth grade students were surveyed. Results indicated SoB related more strongly to academic achievement than behavioural outcomes of absenteeism, tardiness and effort (Goodenow, 1993a). This was consistent with others, who have also found a direct relationship between SoB and achievement (Finn, 1993; Hagborg, 1998; Roeser et al., 1996; Voelkl, 1997). Sense of belonging was also higher for girls than boys and accounted for a substantial proportion of the variance in motivation related measures (Goodenow, 1993a). These findings further demonstrate the relationship between SoB and academic achievement and
consequently how it affects school behaviour and motivation. Students who get high grades, find school a positive experience and are more motivated to participate. These students will achieve academic goals that will propel them into future aspirations, but also a belief in their own self-efficacy. Sense of belonging therefore, has particular pertinence to those at the lower end of the achievement scale, since unmet belonging needs can disadvantage them both personally and academically (Connell & Wellborn, 1991; Goodenow, 1993a).

Detrimental Effects of Alienation

Students who don’t have a strong sense of belonging within the school are likely to feel alienated (Goodenow, 1993a; Hymel et al., 1996; Wehlage et al., 1989). One of the most detrimental outcomes of alienation from school, is the formation of gangs (Burnett, & Walz, 1994; Sergiovanni, 1994). Adolescents whose needs for belonging are not met at school, can get a strong SoB within a gang that is not based on achievement (Kunc, 1992). Other negative effects were identified in a study by Battistich and Hom (1997), who investigated the relationship between students’ sense of the school as community and the prevalence of problem behaviours among 1434 fifth and sixth grade students. Students who did not experience a sense of school community were more likely to engage in drug use, delinquency and victimisation (Battistich & Hom, 1997). Although this study did not focus specifically on belonging it is nevertheless relevant, since as previously mentioned the sense of community literature identifies belonging as an important component of community (McMillan & Chavis, 1986; Pretty, Conroy, Dugay, Fowler & Williams, 1996).

In conclusion, there is a considerable body of empirical evidence
supporting the claims of developmental and motivational theorists, that a SoB is a fundamental human need (Baumeister and Leary, 1995; Deci & Ryan, 1985; Maslow, 1970), that if unmet can lead to problems of a psychological and pathological nature (Connell and Wellborn, 1991).

Experience of belonging in the school has been consistently associated with achievement outcomes (Finn, 1993; Goodenow, 1993a; 1993b; Goodenow & Grady, 1993; Hagborg, 1998; Roeser et al., 1996; Voelkl, 1997) and is apparently mediated by positive regard and satisfying relationships with teaching staff, which lead to feelings of acceptance (Battistich, et al., 1999; Roeser et al., 1996; Wehlage et al., 1989). Conversely, those students with lower achievement outcomes experience less belonging and are likely to feel alienated. These effects have been manifested by disengagement, boredom, (Finn, 1993; Voelkl, 1997), and lack of motivation and effort, absenteeism, tardiness (Goodenow, 1993a; Goodenow & Grady, 1993) and delinquent behaviours, victimisation and drug use (Battistich & Hom, 1997). Therefore SoB has been shown to be enormously beneficial as a motivating force that encourages students' participation. However because current assessment methods largely ignore the effort, persistence and progress of less able students, only those who get the highest grades that will be accorded its benefits. High achievement is equated with respect and acceptance which lead to feelings of belonging, whilst those at the lower end of the achievement scale may feel they do not 'fit in' or belong, and feel alienated instead.

**Self-Concept and Self-Esteem**

Whilst the way schools focus on achievement not only impacts on students' sense of belonging and motivation, it is also associated with their
self-concept and self-worth (Covington, 1992, 2000; Kunc, 1992; Harter, 1988, 1993, 1996a). Harter (1996a), contended that "we attend to the appraisals of significant others and our perceptions of their opinions come to be incorporated into our self-concept" (p.16). Grades also communicate powerful messages about the self. "No single thing contributes more to a student’s sense of worth than does a good report card" (Covington & Teel, 1996, p.10). Therefore, less than exemplary report cards may detract from self-worth or have a negative effect.

Covington (2000) referred to the wide array of classroom incentives as part of the ‘ability game’ (p.182). Positive reinforcers include internalised satisfaction, awards, praise and high grades. Negative reinforcers include the threat of poor grades, warnings, isolation and withdrawal of privileges (Covington, 2000). The main challenge of ability or competitive games is to enhance ones reputation by beating others and avoiding failure. This is because childrens’ self-esteem is at stake, since poor grades imply a lack of ability that can trigger feelings of worthlessness (Covington, 2000). This may encourage rote style learning and diminish the importance of task mastery by placing more emphasis on signs of achievement (Covington, 2000).

The Work of Susan Harter

Harter’s (1993, 1996a, 1998), extensive study in the area of self-concept and self-esteem is based on the work of the early self theorists, James (1890, 1892), and Cooley (1902). A brief synopsis of Harter’s formulations in relation to James and Cooley follows.

Cooley (1902), believed social interactions formed the basis of self-esteem. He proposed the idea of the ‘looking glass self’, believing that self-
esteem is based on the perceptions and opinions of significant others (Harter, 1993). Put simply, this means perceived higher regard or approval from others is internalised into higher self-esteem, whilst disapproval results in feelings of low self-worth.

Based on Cooley’s work, Harter (1993) was interested in the role of social support in relation to self-esteem and has investigated the area extensively. For Harter (1993), the term social support refers to approval from significant others. Students have four potential sources of support including, parents, teachers, classmates and close friends (Harter, 1993). Social support is found to correlate directly with self-esteem, so those who receive little approval have lower self-esteem with the reverse also being true (Harter, 1996b). Later work by Harter (1996a), to distinguish the effects of different types of support, revealed approval support was most highly related to self-esteem, when compared to both emotional and instrumental support. For students, the perceived approval of parents and classmates is important for self-esteem and may differ from actual approval, reported by others (Harter, 1996b). However, support or approval from others may be conditional on required behaviours and attitudes and this conditional element undermines self-esteem (Harter, 1993, 1996a). “Ones level of competence or adequacy directly influences the amount of support one receives from significant others” (Harter, 1993, p.102). This extends the reciprocal nature of the ‘looking glass’ notion, since one must earn approval, but when received, it represents a reflection of the self. In the classroom, high grades are an established way to earn approval. Harter’s (1993), work not only supported Cooley’s theory of the self as a social construction, but also demonstrated the consequential impact that
significant others can have on adolescents’ self-worth.

James’ (1890, 1892), approach differed from Cooley’s. His theory of self-esteem is summarised as the ratio of one’s aspirations for success to one’s pretensions, or ability (Harter, 1993). James proposed individuals mainly focus on their achievements and aspirations in areas that are important to them. Harter (1988), expanded on James ideas by developing a multidimensional model of self-concept. For adolescents, eight dimensions were identified that included, scholastic, social, athletic, physical appearance, job, romance, behaviour and close friendships. So if it were important to be attractive, or academically able and this agreed with one’s perception of self, then the outcome would be high esteem. On the other hand, an incongruity would lead to low self-esteem (Harter, 1993). The degree of importance is relevant since those with high self-esteem can disregard areas in which ability is low and focus only on those where competence is perceived, thereby maintaining self-esteem (Harter, 1993).

However since 85% of children felt scholastic competence was important (Harter, 1996b), and because as previously noted the majority of children are average, an inevitable discrepancy is implied for most children.

The Harter (1993), model of self-evaluations in children and adolescents identified two determinants of self-esteem. Firstly, the importance of ones perceived competency and secondly, the way social support or approval appears to be conditional on competency. Within the school, approval is likely to be conditional on both academic achievement and behaviour and students may see themselves reflected in evaluations, based on their grades. Therefore low achieving students are more likely to internalise disapproval.
Competence and Mastery

Kavussanu and Harnisch (2000), were interested in individual differences in the way competence is conceptualised, based on previous work by Nicholls and Miller (1983). Nicholls and Miller (1983), determined children perceived ability in different ways and that effort and capacity had different implications for children’s self-concept. Kavussanu and Harnisch (2000), postulated that children who were task oriented perceived greater effort resulted in greater ability or achievement. These children self-reference their perceived competency by focusing on their improvement and mastery of tasks. Whilst children who were ego oriented, perceived greater capacity resulted in high achievement. These children reference themselves against others, and see themselves as powerless to improve. To examine these contentions and the relationship of perceived athletic ability and global self-esteem, Kavussanu and Harnisch (2000), surveyed 907 children from 11 to 14 years. It was found that high task orientation corresponded to high self-esteem regardless of level of perceived ability in relation to others. This reflected the use of self-referenced rather than social referenced, criteria to judge competency by focusing on improvement, skill learning and personal progress, as opposed to out performing others (Kavussanu & Harnisch, 2000). Children who perceived their ability as below average, compared to peers had lower self-esteem (Kavussanu & Harnisch, 2000). Although this study examined athletic competence and self-esteem, the findings might cautiously be inferred to also have meaning for scholastic competence. It was not the athletic domain that demonstrated importance, but rather how either social or self-referencing in the formation of self-concept, impacted differently on self-esteem. Finding some students’ self-
concept is based on their own task mastery and improvement offers hope for the future, as schools may be able to find ways to foster this in most students. This is important since focusing on mastery and improvement may enhance both self-esteem and motivation.

Motivation and Self-Esteem

Whilst reviewing the need for belonging and the constructs of self-concept and self-esteem, motivation has been a recurring theme that is intricately entwined with these aspects of school life. Simply defined, motivation “means to be moved to do something” (Ryan & Deci, 2000, p.54). An intrinsic motivation is inherent and within the classroom may inspire action because of interest, curiosity or potential pleasure in scholarly endeavour. Whereas extrinsic motivation has consequences outside of the self, including desire for high grades and teacher approval (Covington, 1992; Harter, 1996b; Ryan & Deci, 1999). Since motivation is especially germane to students’ school success, a closer examination of this important process is warranted.

There is evidence that perceived scholastic competence is highly related to motivation (Goodenow, 1993a) and also that motivation decreases (Goodenow, 1993b) and becomes more externally oriented as children progress through school (Harter, 1996b; Ryan & Deci, 2000). To investigate this issue, Harter (1996b), examined motivational orientations of children before and after changing to high school, over a seven month period. It was found that fifty percent of students’ motivation was directly related to the direction of their perceived scholastic competence (Harter, 1996b). Those who perceived their scholastic competence increased in high school also had increased intrinsic motivation, while perception of decreased scholastic
competence was related to less intrinsic but more extrinsic motivation.

Harter (1996b) hypothesised the changes in motivation were due to high school teachers' greater emphasis on grades and heightening of academic competition between students. It was believed this led students to reevaluate their scholastic competence, and therefore their motivational orientation. To investigate, Harter (1996b) constructed a questionnaire for both students and teachers that focused on grades, competition, control or choice and lack of personal interest. Results from a large middle school population of 6th, 7th, and 8th grade students supported the hypotheses that with increasing grade level, teachers were perceived as more evaluative and controlling, made increasing social comparisons and school work was boring and irrelevant. When the same scale was applied to teachers they refuted increasing emphasis on grades and social comparison. However, these opposing results appear to have been derived from a scale that contains highly judgemental, generalising and leading questions, rather than reflections of personal experience (de Vaus, 1985). For example, “The teachers put too much emphasis on grades” and “Teachers seem more concerned about the grades students get, than about what they are learning” also “Teachers expect students to compete too much with their classmates” (Harter, 1996b, p.20). These leading questions are likely to result in affirmative answers from students and be refuted by teachers, who would probably feel they were criticised (de Vaus, 1985). Therefore, whilst Harter (1996b) successfully demonstrated perceived scholastic competence was directly related to motivational orientation, these patterns may not be validly attributable to the effect of teachers' evaluations. These inconclusive results do not mean students are not affected by teachers evaluations, since
others have found some evidence that this is the case (Goodenow, 1993b; Roeser et al., 1996; Ryan & Deci, 2000; Wentzel, 1998). However further investigation requires adherence to more stringent guidelines for scale construction, as set out by de Vaus (1985), for example. Also Harter (1996b) does not consider that grading practices and evaluations are usually the product of departmental education policies, that require teachers’ compliance (Letgers & McDill, 1994). Therefore whilst teachers’ roles may be relevant to motivation, it is also important to consider school issues more broadly, at the policy level.

**Self-Determination Theory**

In Self-Determination Theory (SDT), Deci and Ryan (1985), determined various goals or reasons could result in either *intrinsic* or *extrinsic* motivation. Self-determination refers to the reason for responding to a motivation, either because of external pressure, a reward or inner desire (Ryan & Deci, 1985). Underlying SDT are the fundamental psychological needs for competence, autonomy and relatedness (Ryan & Deci, 2000). In the educational context, intrinsic motivation results in ‘high-quality learning and creativity’ and therefore factors that either foster or undermine it are particularly important to education (Ryan & Deci, 2000, p.55).

Positive performance feedback enhances intrinsic motivation, however there is consistent evidence that intrinsic motivation can be undermined by “virtually every type of expected tangible reward made contingent on task performance” (Ryan & Deci, 2000, p.59). Rewarding performance outcomes is perceived as a form of control whereas rewards for behaviour leading to the outcome, produces feelings of competence (Ryan & Deci, 2000). Students that experience control in the classroom lose
Belonging and Self-Esteem

initiative and have diminished learning (Covington, 1992; Ryan & Deci, 2000). These effects offer further support that focusing on improvement and mastery (Kavussanu & Harnisch, 2000), is more productive, rewarding and motivating than centering only on achievement outcomes.

Understanding the circumstances of extrinsic motivation is also important, because many school activities are tedious and repetitious (Ryan & Deci, 2000). Control and autonomy are also very relevant to extrinsic motivation, because when students choose to engage in an activity that offers some kind of reward, performance is greater (Ryan & Deci, 2000). An example of control is a child doing homework to avoid parental discipline, whereas an autonomous choice would be because it contributes to a career path (Ryan & Deci, 2000). In fact more autonomous extrinsic motivation has been associated with greater classroom engagement, better performance, less dropping out, higher quality learning and greater psychological well being (Ryan & Deci, 2000). The conditions most likely to encourage autonomous actions for external rewards are those where belonging needs are met, because people are more likely to engage in behaviour that results in connection with others (Ryan & Deci, 2000). Both students and teachers have reported experiencing school positively when relationships between them are caring and rewarding (Roeser et al., 1996; Sergiovanni, 1994). Grading practices that increasingly reinforce external motivation within schools and foster competition (Harter, 1996b), are therefore likely to be perceived as a form of control which may alienate students and lead to disengagement.

In summary, the connection between students’ motivation and perceived scholastic competence is significantly influenced by classroom
Belonging and Self-Esteem

Factors. Feedback in the form of conditional tangible rewards impacts negatively by controlling behaviour and failing to address needs for autonomy and competence (Harter, 1996b; Ryan & Deci, 2000). It also diminishes intrinsic motivation. On the other hand, even extrinsic motivation has positive effects on achievement and the need for competency, if it is acted upon autonomously rather than being contingent on desired outcomes. Autonomous, extrinsic motivation is most likely to be mediated by supportive, caring relationships that foster belonging and school engagement.

School Engagement

Engagement has been defined as consisting of two components. A behavioural aspect, which relates to the degree of participation in the classroom (Finn, 1993; Wehlage et al., 1989) and an affective component. The latter refers to identification (Finn, 1993) or SoB as previously discussed, therefore participation will now be addressed.

Finn (1993), identified four levels of participation which are initiated when a child begins school and potentially increase over time as the child matures. Level one includes being willing to attend school, be prepared and respond to teachers’ directives and questions. According to Finn (1993), this is the most important level. If it is not established during a child’s initial school years it may fail to develop and ultimately lead to academic failure and subsequent dropping out (Finn, 1993). Although others have shown this is the time students are most intrinsically motivated (Harter, 1996b; Ryan & Deci, 2000), so participation should be high. The second level of participation requires students to display more initiative, by asking questions, seeking help, completing homework and being comfortable
within the classroom (Finn, 1993). The third level includes social, athletic and extracurricular activities and the final level involves goal setting and decision making for both academic and disciplinary outcomes (Finn, 1993). Therefore actions and attitudes both in and out of the classroom manifest participation.

With a nation-wide sample of eighth grade students, Finn (1993) sought to determine whether academically successful students in three categories that identify at risk students, differed from less successful students that did not have at risk status. The three risk categories for the successful students were ethnic minority, low SES, or speaking a first language other than English. The results revealed distinct differences between the two groups and showed greater participation was associated with higher academic achievement (Finn, 1993). The successful students identified at risk because of social factors, attended classes on time, came prepared, were participatory rather than disruptive, did more homework and engaged in more extracurricular activities.

Students’ engagement is the final outcome of a process that is mediated by, achievement level, SoB, self-concept and motivation. A conceptual model of alternative pathways arising from this process is demonstrated in Figure 1. The strictly linear pattern of the model does not take into account other factors that impact on students, such as the appropriateness of the curriculum or factors outside the school. However, it provides a clear demonstration of the most pertinent school related issues that may result from focusing on achievement and how this can affect SoB, self-concept and motivation.
Figure 1. Theoretical, alternative pathways resulting from schools focusing on achievement.
Prevention and Intervention

The problem for educators is to ensure all students are motivated to participate. This can only happen if schools acknowledge that they have an intermediary role in student engagement (Carnahan, 1994). Connell and Wellborn (1991) propose that when basic psychological needs are met within the school context then “engagement will occur and be manifested in affect, behavior and cognition” (p.52). While various ways of addressing issues relating to students’ disengagement and subsequent dropout have been discussed in this review, some common themes predominate. These include the need to create a more relevant curriculum, that students will interpret as meaningful to their own lives (Battistich, et al, 1997, Curriculum Council, 1999; Legters & McDill, 1994; McPartland, 1994; Wehlage, et al., 1989), supportive and caring school communities (Battistich, 1997, Wehlage, 1989) and greater focus on improvement, mastery and skill acquisition (Covington, 1992, 2000; Covington and Teel 1996; Kavussanu & Harnisch, 2000; Harter, 1996b). These strategies can meet needs for belonging, competence and autonomy, enhancing the self-worth of all students and facilitate the fulfillment of achievement goals that will lead to future opportunities.

The Curriculum

There is growing recognition of the need for schools to expand the programs they offer to senior high school students (Battistich et al., 1999; Wehlage, et al. 1989). “Students need to relate school work to their own lives and future goals” (McPartland, 1994). Therefore curricula need to change toward real world learning with closer connections to work or college (Letgers & McDill, 1994). Vocational Education Training (VET) programs offered in public high schools in Western Australia address some
of these ideals (Curriculum Council, 1999). Current programs, revised in 1997, now emphasise pathways leading to university, training and employment, or self-employment. Schools devise their own VET programs, so they are usually contextualised within their own communities. The programs incorporate both on and off-the-job training and may liaise with other institutions such as TAFE (Curriculum Council, 1999). VET programs represent an ideal way of addressing a previously ‘narrow curriculum’ (Wehlage, et al., 1989), although they are not prevalent in all schools. They also cater for students who do not have a strictly academic vocation. In this way they are likely to foster feelings of belonging and self-esteem, thereby motivating student engagement.

Caring School Communities

While the school’s primary aim is to educate, students clearly have personal and psychological needs that are evident in the school context. In the USA, Catholic Schools were found to be more effective in retaining at risk students (Wehlage et al., 1989). This was attributed to a pastoral focus on individuals rather than their achievement (Wehlage et al., 1989). “Many students today view the school as failing to show concern for their problems and having little knowledge about the needs and talents of individuals” (Wehlage et al., 1989, p.34). Also social and ethical values may remain underdeveloped if attention is only directed toward academic outcomes, resulting in citizens who contribute to society in negative ways (Battistich et al., 1999; Wentzel, 1998)

The creation of caring school communities that form relationships between school, parents and community is one solution that has been considered (Battistich, et al., 1997; Legters & McDill, 1994). When schools
are caring of students despite their degree of academic success or failure, and take the time and trouble to meet their needs by focusing on other ways of helping, students can feel accepted and valued rather than alienated. This contention is supported by Battistich et al., (1997) whose longitudinal study of 24 elementary schools found many positive outcomes were associated with the implementation of specific programs to create caring classroom communities. These included social, motivational and academic improvements. Ryan and Deci (2000) made a similar point when they referred to the importance of connection between students and teachers in the school, and how relationships enhance motivation.

Assessment

The ‘reward scarcity’ that operates in the majority of classrooms impacts negatively on most students desire to learn (Covington, 2000). Therefore new forms of assessment that create opportunities for all students to be recognised, are desirable. Encouraging students to focus on their improvement, mastery and skill acquisition fosters learning (Kavussanu & Harnisch, 2000; Nicholls & Miller, 1983) by meeting fundamental needs for autonomy, competence and relatedness (Connell & Wellborn, 1991; Ryan & Deci, 2000). “Individualised incentive and reward structures that value students’ incremental improvements can motivate students to try harder, foster an intrinsic interest in the subject matter, and improve performance” (Letgers & McDill, 1994). Focusing on students’ actual performance in this way is likely to have positive affects on the way students feel about school and enhance both their motivation and scholastic self-concept.

In Western Australia the Curriculum Council (2000) is introducing new forms of assessment. This involves the use of student outcome
statements, which focus on the level of learning achieved by students, in a given area. For example an outcome statement for Science might assess students understanding of ‘Natural and Processed Materials’. Eight learning levels from “Demonstrates awareness of materials and their properties” to “Understands how to assess the role of science in helping people describe the structure, change and use of materials”, demonstrate students’ progress (Curriculum Council, 2000, p.7). This method is intended to motivate students by providing an understanding of the purpose and relevance of what they do, while informing teachers of student’s progress. However if this knowledge is still summarised by a semester grade, then the benefits of the method may be undermined.

Future Directions

The importance of a sense of belonging has been reiterated throughout this review. It has been shown to not only be a basic need (Baumeister & Leary, 1995) but also to impact upon students’ motivation (Connell & Wellborn, 1991; Goodenow, 1993; Ryan & Deci, 2000) and school engagement (Finn, 1993, Wehlage, 1989). Sense of belonging is also believed to be associated with school dropout, although there has been no empirical support of this as yet. Therefore further investigation of this important issue is necessary, to determine whether SoB influences students’ intentions in post-compulsory schooling. This information may help to determine ways to retain students to complete their secondary schooling, by meeting their fundamental needs for belonging.

Within the literature there have been a number of similarities between SoB and self-esteem. Both constructs seem to be fostered by support or approval (Goodenow, 1993; Harter, 1993). Each has been related to
motivation (Goodenow & Grady, 1993; Harter, 1996b; Ryan & Deci, 2000), and engagement (Finn, 199; Voelkl, 1997; Wehlage, 1989), yet clearly they are quite different constructs. Therefore it seems reasonable to suppose that SoB may not only be important to students’ school engagement, but also to the way they perceive themselves and develop their self-esteem. Further investigation into the way SoB is related to self-concept and self-esteem, could provide important information about the schools’ role in students’ psychosocial development. Knowledge of this type is crucial to direct ways that will enhance the well being of all students.

Conclusion

This review has addressed a range of school factors that can impact on students’ engagement and subsequent retention within the education system. Restrictive and irrelevant curricula, an unsupportive school environment and use of traditional methods of assessment, can all contribute to students’ disengagement. These factors can also have negative consequences for students’ sense of belonging, self-esteem and motivation. Further investigation of these issues is crucial to guide future directions for secondary school students. One solution is to increase the availability of vocational subjects, and so make school more relevant to students’ future goals. Another way is through the creation of caring school communities (Battistich et al., 1997; Wehlage et al., 1989), where all students feel accepted, respected and valued. There is also a need for schools to focus less on achievement and to be more process oriented by recognising students’ improvement, mastery and skill acquisition. In these ways schools can contribute to students psychosocial well being and also to their future lives as responsible citizens who make a valid, worthwhile contribution to society.
Reference


Covington, M.V. (2000). Goal theory, motivation, and school achievement:


Sense of Belonging and Self-Esteem: What are the Implications for Educational Outcomes of Secondary School Students?

Research Report
Abstract

The psychological constructs of Sense of Belonging (SoB), self-concept and self-esteem are thought to be associated with students who drop out of school. In seeking empirical support, this study examined the differences between three groups of secondary school students; those intending to leave school before Year 12, those intending to do Wholly School Assessed (WSA) subjects and those who intend to do a Tertiary Entrance Exam (TEE) course. Participants were 188 Year 10 students at two suburban schools in low SES areas. The Psychological Scale for School Membership (Goodenow, 1993), measured SoB and the Self-Perception Profile for Adolescents (Harter, 1988), measured eight self-concept domains and self-esteem for each of the three groups. Factorial ANOVAs and Pearson’s Product-Moment correlations were used to analyse the data. TEE students had significantly higher mean SoB, scholastic self-concept and self-esteem and the strongest relationships between these constructs. Those leaving had generally lower scores and the weakest relationship between SoB and self-esteem. There was a linear relationship between SoB and self-concept and also between self-concept and self-esteem. These relationships may indicate that SoB is an integral part of the process of building self-esteem. Recommendations for future research include longitudinal studies in the same area and also inclusion of students’ assessment data.
Sense of Belonging and Self-Esteem: What are the Implications for Educational Outcomes of Secondary School Students?

Student retention rates are an important issue today, since much higher education standards are required within the workforce, than have ever been required in the past. Up until the 1980s it was appropriate for students to leave school after Year 10, if they did not intend to enter university. Today however, rapid advances in technology mean even unskilled employment positions require greater knowledge and expertise. Therefore, it is important to determine which factors contribute to students' decision to complete secondary schooling.

Whilst retention rates in the last decade indicate more students now complete their schooling to Year 12 than at any other period, there still appears to be approximately 30% of students who drop out early. Australian Bureau of Statistics (ABS, 1999), also report fewer male (68.9%) than female (79.9%) students stay at school. Education Department of Western Australia (EDWA, 2000) figures for government schools are even lower, reporting a 66.4% overall apparent retention rate for 1999 and 71% and 60% for females and males respectively. EDWA use the term apparent, since some of these statistics may be explained by students who moved interstate, or into private education. The most worrying figures were for Aboriginal students with only 15% staying until Year 12 in 1997 (EDWA, 1997). What is not evident, are the underlying factors that contribute to students dropping out, and the effect these may have on the psychosocial wellbeing of the individual. Therefore further investigation of this important issue is warranted.

Three general correlates of dropping out have been identified, which
include personal, social and school problems (Wehlage, Rutter, Smith, Lesko & Fernandez, 1989). Personal problems relate to health issues, substance abuse, difficulties with the law, teenage pregnancy and learning disabilities (Carnahan, 1994; Wehlage, et al., 1989). Social factors include low socioeconomic status (SES), having single, divorced or remarried parents and belonging to an ethnic minority (Carnahan, 1994; Finn, 1993; Janosz, M., LeBlanc, M., Boulere B., & Tremblay, R.E., 1997; Wehlage et al., 1989). Lastly, school factors such as truancy, academic failure, suspension and disciplinary problems have all been found to be most closely associated with students dropping out (Carnahan, 1994; Connell & Wellborn, 1991; Finn, 1993; Janosz et al., 1997; Wehlage, et al., 1989). It is important to note that a causal relationship has not been clearly established for the factors associated with students who drop out, however school factors have been identified as the most critical variable in addressing the issue of retaining students at school (Carnahan, 1994; Wehlage et al., 1989).

Poor academic performance is almost guaranteed from students with high rates of absenteeism. Patterns of absenteeism result in poor grades and failure, and can culminate in dropping out (Carnahan, 1994; Wehlage, et al., 1989). Low achievement, was identified as the best predictor of dropout, after grade retention, by Janosz et al., (1997). Although students who get low grades do not necessarily have low ability. Wehlage, et al. (1989), tested a group of adolescent students who had a history of recurrent course failure, for maths and reading ability. The students who had transferred to a special high school with a remedial focus, answered over two thirds of questions correctly. Similarly when Janosz et al. (1997), investigated predictors of dropout among 800 white, French speaking adolescents, it was
found up to 40% were not classed as underachievers. Therefore, although dropout is associated with academic failure, it may not be because students lack the ability to achieve. This could suggest school factors are related, since high rates of absenteeism can also indicate the inability of schools to successfully engage students (Finn, 1993; Wehlage, et al., 1989).

Dissatisfaction with school has been cited as the most prevalent reason for students dropping out or disengaging from school (Hymel, Comfort, Schonert-Reichl & McDougall, 1996). One factor that may contribute to this is a narrow, restrictive curriculum (Battistich, 1999; Covington, 1992; Wehlage et al., 1989). In Australia, until 20 years ago, students mainly stayed at school after Year 10 because they wished to matriculate to enter university. Since then however, all students are generally expected to stay at school to complete their education. Yet, senior high school courses today still have a strong academic orientation that is not always pertinent to students’ current needs.

There are now two types of students in post-compulsory education. Firstly, those with an academic focus intending to enter higher tertiary education, who will need to enroll in Tertiary Entrance Examination (TEE) subjects. Secondly, students who are planning to go to technical or business colleges, or get an apprenticeship or job after they leave school. These students do not have to choose TEE subjects, although they may be inclined to since TEE subjects are accorded higher status within employment and education fields (Curriculum Council, 1999). The main alternative is Wholly School-Assessed (WSA) subjects, which still largely fit within the academic framework. The other choice is vocational subjects that have been introduced in recognition of changing needs. However a range of vocational
subjects is not readily available at every school. Consequently some students may find the largely academic curriculum seems to have little application in the real world. "Most subjects place little value on the individual as a social or co-operative being ... or on the practical application of knowledge" (Curriculum Council, 1999, p.3). If students see no value in education, they will not be motivated to commit themselves to school.

Another factor within the school that may contribute to students' disengagement are traditional methods of assessment (Covington, 1992, 2000; Harter, 1996b). These also reflect an area where little has changed over the years. Giving students an 'A', 'B' or 'C' grade, is a convenient way of conveying to the school the degree of knowledge a student has acquired. However students may interpret this information in a different way, feeling it is a representation of their personal worth (Covington, 1992; Harter, 1996b). This idea can be inferred by parents, teachers and others, who use grades to classify achievers as an 'A' or 'B' student, or even a 'straight A' student. Since the majority of students are likely to be average (Harter, 1996b), not many will be given the kudos that attends an 'A' grade, and consequently may feel they are second best or failures. It is usually high achieving students who receive acclaim from teachers and the school, in the form of honour awards and other privileges (Roeser, Midgely & Urdan, 1996). Therefore, others whose work does not receive this type of recognition, may feel they do not fit in or belong at school (Wehlage et al., 1989). This can be particularly true for those at the lower end of the achievement scale (Goodenow, 1993a).

Sense of belonging is an important factor that has been associated with student engagement (Connell & Wellborn, 1991; Goodenow, 1993a,
Belonging and Self-Esteem 45

Belonging has also been repeatedly and consistently cited as an essential and fundamental psychological and social need (Baumeister and Leary, 1995; Connell & Wellborn, 1991; Finn’s, 1993; Goodenow, 1993; Hymel et al., 1996; Maslow, 1970; McMillan & Chavis, 1986; Ryan & Deci, 2000). It has been conceptually associated with school dropout rates and identified as the potentially critical factor, in the retention and participation of at risk students (Covington, 2000; Finn, 1993; Goodenow, 1993a; Wehlage, 1989). This is because if students do not have a sense of belonging they are likely to feel alienated from school and be more inclined to leave.

Within schools, Goodenow (1993a), has defined sense of belonging (SoB) as “the extent to which students feel personally accepted, respected, included, and supported by others in the school environment” (p.80). An initial study by Goodenow (1993b), investigated 353 middle school students, to determine the relationship of perceived classroom belonging, support and motivation. Students’ completed self-report measures for expectancy of success and a new scale to assess classroom belonging. Results indicated belonging was significantly related to students expectancies and values. Teacher support was also significantly related to these measures, indicating perceived support is essential to motivation.

To investigate the relationship of school belonging and friends values, Goodenow and Grady (1993), surveyed 301 junior high school students in a working class city. School belonging was assessed with the Psychological Sense of School Membership (PSSM) scale (Goodenow, 1993a). Other measures for friends values, motivation and effort and persistence were also
used. Friends values were associated with school belonging but had little impact on motivation. However, consistent with the previous study (Goodenow, 1993b), high SoB was associated with students who were motivated and academically engaged. In a subsequent study SoB was also related to achievement and teacher-rated effort by students (Goodenow, 1993a). These findings indicate the value of SoB, in terms of students’ motivation and subsequent achievement. Nevertheless only students who achieve well may experience the value of SoB, since higher SoB is also related to higher motivation and achievement.

Voelkl (1997) was interested in identifying the process by which students identify with school. Identification was defined as feelings of school belonging and valuing school related outcomes (Voelkl, 1997). A sample of 1,335 white and African-American students were investigated longitudinally in grades 4, 7 and 8, to examine the predictive power of school behaviour and achievement on subsequent identification. It was found students who had attained high grades and actively participated in school work identified with school, while the reverse was true for those who experienced failure and were passive (Voelkl, 1997). Those who had higher achievement, participation and identification in fourth grade, displayed the same pattern in later grades, although the relationship to identification became stronger. This may have been because there is more emphasis on achievement in higher grades and therefore more support and approval (Goodenow, 1993b; Harter, 1996b; Roeser et al., 1996). Students who didn’t identify with school were expected to be the most likely to drop out of school (Voelkl, 1997). Like the previous examples (Goodenow, 1993a, b; Goodenow & Grady, 1993), this study established a strong relationship
between achievement, participation and SoB, again indicating that the more students achieve, the more they will be accorded respect and acceptance within the school, and therefore experience belonging.

Others have also associated achievement outcomes with school belonging (Finn, 1993; Hagborg, 1998; Roeser et al., 1996) which may be mediated by positive regard and satisfying relationships with teaching staff, that leads to feelings of acceptance (Battistich, et al., 1999; Roeser et al., 1996; Wehlage et al., 1989). Conversely, those students with lower achievement outcomes experience less belonging and are likely to feel alienated. Current methods of assessment reward high achieving students, and pay less attention to the effort, mastery and progress of less able students. Therefore these students are likely to feel they don’t ‘fit in’ at school, perhaps because they feel their work is not good enough. These effects can be manifested by disengagement, boredom, (Finn, 1993; Voelkl, 1997), lack of motivation and effort, absenteeism, tardiness (Gooenow, 1993a; Gooenow & Grady, 1993), and delinquent behaviours (Battistich and Hom, 1997).

While relationships and acceptance are obviously important to a sense of belonging, they also have relevance to self-esteem (Harter, 1996a; Maslow, 1970; Walker & Greene, 1986). Harter (1996a), has observed that “we attend to the appraisals of significant others and our perceptions of their opinions come to be incorporated into our self-concept” (p.16). Harter’s extensive work in the areas of motivation, self-concept and self-esteem is based on the early self theorists James (1890, 1892), and Cooley (1902).

Cooley, theorised that self-esteem was a social construction and
proposed the idea of the ‘looking glass self’, believing that self-esteem is based on the perceptions and opinions of significant others (Harter, 1993). The self is reflected in others responses. Put simply, this means perceived higher regard or approval from others is internalised into higher self-esteem, whilst disapproval results in feelings of low self-worth.

Based on Cooley’s work, Harter (1993) was interested in the role of social support in relation to self-esteem and has investigated the area extensively. For Harter (1993), the term social support refers to approval from significant others. However, Harter (1993, 1996a), determined that support or approval from others may be conditional on required behaviours and attitudes and that conditions, undermines self-esteem. “One’s level of competence or adequacy directly influences the amount of support one receives from significant others” (Harter, 1993, p.102). Social support is found to correlate directly with self-esteem, so those who receive little approval have lower self-esteem with the reverse also being true (Harter, 1996b). Therefore if approval is contingent on achievement, few students can receive its benefit to their self-esteem, since most have average ability.

In the classroom, high grades are an established way to earn approval, but this is only attainable for a few. Harter’s (1993, 1996b), findings correspond with those from the SoB literature. Goodenow (1993b), found more perceived support also related to greater SoB, and others found SoB related to achievement and therefore approval (Voelkl, 1996; Finn, 1993; Hagborg, 1998; Roeser et al., 1996). Hence, not only are low achieving students likely to feel alienated from school, but if low grades are perceived as disapproval, and this is internalised, then they will also have a poor self-
concept of their ability and worth.

James' approach to self-esteem differed from Cooley's. His theory is summarised as the ratio of one's aspirations for success to ones pretensions, or ability (Harter, 1993). James proposed that individuals mainly focus on their achievements and aspirations in areas that are important to them. Hence, if aspirations were matched by achievement, this would result in high self-esteem (Harter, 1993). So if it was important to be attractive, or academically able and this agreed with one's perception of self, then the outcome would be high esteem. On the other hand, an inconsistency would lead to low self-esteem (Harter, 1993). Building on James' ideas, Harter (1988) developed a multidimensional model of self-concept. Eight dimensions were identified for adolescents. These include scholastic, social, athletic, physical, job, romantic, behaviour and close friendship self-concepts (Harter, 1988). The degree of importance is relevant since those with high self-esteem can disregard areas in which ability is low and focus only on those where competence is perceived, thereby maintaining self-esteem (Harter, 1993). For example, adolescents with low scholastic self-concept could have high self-esteem if they did not consider their scholastic ability was important.

Contemporary views of self-esteem tend to be multidimensional rather than just global. In the development of the Self-Perception Profile for Adolescents (SPPA), Harter (1988), identified eight dimensions that self-concept could be based upon. However since 85% of children felt scholastic competence was important (Harter, 1996b), and because the majority of children are average, an inevitable discrepancy is implied for most children.

The high importance children place on scholastic competence may
reflect societal values. "...in our society individuals are widely considered to be only as worthy as their ability to achieve" (Covington, 2000, p.8). Therefore if achievement is equated with worth in society, then in the school, grades may also be equated with worth (Covington, 2000). These values can encourage children to protect their self-worth by avoiding failure, through procrastination and reduced effort. That way failure can be attributed to poor effort, rather than poor ability, thereby maintaining self-worth (Covington, 2000).

Whilst reviewing the need for belonging and the constructs of self-concept and self-esteem, motivation has been a recurring theme, and is obviously pertinent to students' school engagement. Two types of motivation that are commonly referred to are intrinsic and extrinsic (Deci & Ryan, 1985). An *intrinsic* motivation is inherent and within the classroom may inspire action because of interest, curiosity or potential pleasure in scholarly endeavour. Whereas *extrinsic* motivation has consequences outside of the self, including desire for high grades and teacher approval (Covington, 1992; Harter, 1996b; Ryan & Deci, 1999).

There is evidence that perceived scholastic competence is highly related to motivation (Goodenow, 1993a) and also that motivation decreases (Goodenow, 1993b) and becomes more externally oriented as children progress through school (Harter, 1996b; Ryan & Deci, 2000). To investigate this issue, Harter (1996b), examined motivational orientations of children before and after changing to high school, over a seven month period. It was found for fifty percent of students, their intrinsic motivation either decreased or increased. The direction of students' motivation was directly related to the direction of their perceived scholastic competence (Harter,
Belonging and Self-Esteem

1996b). Those who perceived that their scholastic competence increased in high school also had greater intrinsic motivation, whilst perception of decreased scholastic competence was related to less intrinsic, but more extrinsic motivation. Harter (1996b), hypothesised these changes were due to high school teachers' greater emphasis on grades and heightening of academic competition between students. Believing this led students to re-evaluate their scholastic competence, and therefore their motivational orientation.

Therefore there appears to be two theoretical pathways that students may follow on their journey through school, as displayed in Figure 1. Those with higher ability may take the path of getting good grades and the attendant respect and acceptance that can lead to them experiencing a SoB within the school and also a high self-concept. These feelings can motivate students to full engagement by working hard and applying themselves to their school work. Alternatively, lower achieving students, may find their lower grades do not accord them any acclaim. Instead they may receive little attention, or be responded to negatively. This could result in feelings of alienation from school, and a poor scholastic self-concept. Therefore these students may be less likely to feel motivated to apply themselves to their schoolwork, as they may perceive little benefit and consequently disengage from school. The conceptual pathways are representations of the upper and lower limits of engagement, so there are likely to be many pathways that fall in between these two examples. Furthermore, these alternative theoretical pathways are linear representations that do not consider other social and personal factors that may also have an impact on
Figure 1. Theoretical, alternative pathways resulting from schools focusing on achievement.
students’ school journey. However the conceptual model does take into account some important factors that can impact on students within the school context. It shows the possible process of how these factors may influence students desire to complete their schooling, and also impact on their psychological well being. If these factors are combined with a belief that the curriculum is irrelevant to future goals, then low achieving students will see little point staying at school.

In the foregoing review, sense of belonging and self-concept have been shown to be two central factors associated with students school motivation and subsequent engagement. Because of the associations with achievement, motivation and engagement, it has been hypothesised low SoB could also be related to students who drop out (Goodenow, 1993; Finn, 1993; Voelkl, 1997; Wehlage, 1989). To date, this has not been demonstrated empirically. Therefore this exploratory study proposes to examine the relationship among sense of belonging, self-concept and self-esteem and their relevance, to students intentions with respect to post-compulsory schooling, beyond year 10. Specifically this report will examine differences in SoB, self-concept and self-esteem, between Year 10 students who intend to leave school before Year 12, and those who intend staying to complete either a Wholly School Assessed (WSA) or Tertiary Entrance Exam (TEE) course in Year 12. TEE students should represent a group who are high achieving, since good grades are required to be eligible to enroll in TEE subjects. Since achievement has been consistently associated with SoB it is hypothesised this group will have higher SoB scores. Results from previous research also suggest SoB is strongly associated with self-esteem (Baumeister & Leary, 1995; Connell & Wellborn, 1991; Maslow, 1970).
Therefore it is also anticipated that there will be a direct and positive relationship between SoB, self-concept and self-esteem. However, specific relationships between these factors and students intentions to stay at school, have not been previously reported. Therefore, this study will assume an exploratory stance, by simply asking which dimensions of self-concept are most strongly associated with a sense of belonging?

Method

Design

A non-experimental, cross-sectional design was used to determine differences between three groups; those intending to leave school before Year 12, those intending to remain and do either a TEE or WSA course. Relationships among sense of belonging and eight dimensions of self-concept and a global measure of self-esteem were also examined for the three groups.

Participants

A sample of 192, Year 10 students was surveyed. Year 10 is a crucial period as it is the last year of compulsory schooling in Western Australia. It is also when there is an approximate 34% fall in student enrolments, at government schools (EDWA, 2000). Socioeconomic status has been identified as a factor that can indicate at risk students (Carnahan, 1994; Finn, 1993; Janosz et al., 1997; Wehlage et al., 1989). Critical informants confirmed that this was indeed the case in Western Australia and assisted with the identification of schools from low SES areas.

Two suburban schools participated. The first is a large senior high school with 900 students. The second was formerly a senior high school but has been transformed into a middle school, with a total of 300 students in Years
8 to 10. Four surveys were eliminated from the data set because whole pages had been skipped, leaving a total of 188 valid responses.

At the first school, 139 Year 10 students participated in the survey, (67 males, 71 females and one gender unstated). At the second school, 49 Year 10 students responded (35 males and 14 females). Both schools had a 71% attendance rate on the day of testing and all that were present, participated.

There were three groups of participants, those intending to leave before Year 12, those intending to enroll in WSA subjects, and those intending to complete TEE. Numbers and gender of each group are detailed in Table 1.

**Materials**

The Psychological Sense of School Membership (PSSM) scale (Goodenow, 1993) was used to measure sense of belonging. The 18 item scale has yielded good internal consistency for suburban students; with Cronbach’s alpha, .88, and for urban students, .80 (Goodenow, 1993a). Construct validity was also established by testing predictions about likely group and subgroup differences in students’ SoB in school settings (Goodenow, 1993). Researchers using the scale have reported no specific problems (Hagborg, 1998; Goodenow & Grady, 1993) The scale, which is included in Appendix A, includes questions such as: ‘I feel like a real part of (name) School’ and ‘I am treated with as much respect as other students’. Some items have been reversed to prevent a response set, for example; ‘Sometimes I feel as if I don’t belong here.’ Response options range from, Not at all True (1) to Very True (5). When scores are averaged, the midpoint (3) determines either low or high SoB.

Harter’s (1988), Self-Perception Profile for Adolescents (SPPA) was used to measure eight dimensions of self-concept and also self-esteem.
These include Scholastic Competence, Social Acceptance, Athletic Competence, Physical Appearance, Job Competence, Romantic Appeal, Behavioural Conduct, Close Friendship which each measure a dimension of self-concept. The final dimension of Global Self-Worth, is a measure of self-esteem. Each dimension has five items, with a total of 45 items. The nine subscales showed good internal consistency with Cronbach’s alpha from .74 to .93 (Harter, 1988). Keith and Bracken (1996), however point out that since Social Acceptance, Behavioural Conduct, and Job Competence range below .80 they do fall slightly below the minimum recommended criterion. Construct validity of SPPA has been supported by an exploratory factor analysis, although the homogenous nature of items in the subscales has been criticised (Keith & Bracken, 1996). A unique feature of the scale, which elicits both a descriptive and evaluative rating (importance of each domain), has been particularly commended by a number of researchers (Bogan, 1986; Hagborg, 1993; Keith & Bracken, 1996). The two measures can be used to derive a discrepancy score, providing further information about self-esteem. This can be particularly useful in clinical settings. However in this study only the descriptive measure of self-concept will be used and the Global Self-Worth subscale will provide a measure of self-esteem. Items in the SPPA are worded especially to avoid socially desirable, or ideal, rather than true responses. For example: “Some teenagers do very well at their class work BUT Other teenagers don’t do very well at their class work”. Responses can be either “Really true for me” or “Sort of true for me”, for either type of teenager. Items are scored (4) for the most positive response and (1) for the most negative. Approximately half of the statements are reversed with the more
negative statements appearing first. For example, "Some teenagers are very hard to like BUT Other teenagers are really easy to like". Scores are tallied and averaged for each subscale.

Participants were also asked to provide demographic data including gender, age, year level, years of attendance at the school and intentions beyond year 10. Students not intending to complete TEE were also asked to indicate which of a range of options they intended to pursue. Wholly School Assessed students could choose Vocational Education Training (VET) programs. Those intending to leave could choose TAFE, private college, apprenticeship or pre-apprenticeship course or a job.

Procedure

Students received an information sheet explaining the purpose and procedure of the research and that participation was voluntary. Their confidentiality and the anonymity of their results were assured. Both schools preferred students to be supplied with a Withdrawal Form rather than a Consent Form. This was because teachers’ previous experience had shown that students were likely to forget to return Consent Forms in the required time. The Withdrawal Forms were to be signed by parents and students if they did not wish to participate and returned within one week. No students withdrew from the study. The PSSM, SPPA and the demographic questions were given to students to complete during normal class time. The researcher was present to instruct and supervise students completing the scales, which took approximately 30 minutes.

Results

Independent t tests of the two schools revealed no systematic differences on major dependent variables, therefore data was collapsed for
subsequent analyses. Initial data screening was conducted to determine accuracy of data entry, missing values and distribution patterns. Assumptions for the use of Analysis of Variance (ANOVA) and correlational analyses were also assessed. Sense of Belonging (SoB) data was normally distributed and seven missing values were detected, leaving 181 cases. Good internal consistency was demonstrated with Cronbach’s alpha, .82. Nine of the Self-Perception Profile for Adolescents (SPAA) data cases were eliminated from the data set because of missing values, leaving 179 cases. Several outliers were detected amongst the averaged self-concept scores. Therefore, mean self-concept scores more than three standard deviations above or below the mean were adjusted to the next highest or lowest mean score, as recommended by Tabachnick and Fidell (1996). Cronbach’s alpha was slightly lower than reported in the SPPA manual (Harter, 1988), ranging from .71 to .87. Given the exploratory nature of this study and the interest in each dimension of self-concept as conceptually distinct, no adjustment was made to alpha to compensate for familywise error.

A 2 x 3 (Gender x Intention) between-subjects Analysis of Variance (ANOVA) was performed on Sense of Belonging. The assumptions for the use of ANOVA were met. The results for Gender and the three groups of Intention are reported in Table 2. The groups were Leave Before Year 12, do Wholly School Assessed (WSA) subjects or Tertiary Entrance Exam (TEE) subjects. Only a main effect for Intention was found to be significant, $F(2, 175) = 10.49, p < .05, \eta^2 = .107$. Gender did not achieve significance and there was no significant interaction. Descriptive statistics for SoB, Intention and Gender are given in Table 1.
Post hoc pairwise comparisons were conducted using Tukey’s HSD test. These revealed that the mean SoB for the Leaving group was significantly lower than the TEE group. The mean SoB for the WSA group was also significantly lower than the TEE group. This means that the TEE group had a significantly higher SoB than either of the other two groups and there was no significant difference between Leave Before Year 12 and WSA groups.

A series of 2 x 3 (Gender x Intention) between-subjects ANOVAs was also performed on nine dimensions of self-concept. The analyses revealed main effects for Intention and Scholastic Competence, $F(2,173) = 15.30, p < .05$; Behavioral Conduct, $F(2,173) = 11.17, p < .05$; and Global Self-Worth, $F(2,173) = 8.05, p < .05$. Descriptive statistics for self-concept and Intention are displayed in Table 3. Tukey’s HSD test was used to conduct post hoc pairwise comparisons. These revealed that the TEE group had significantly higher Scholastic Competence and Global Self-Worth scores, than either the Leave Before Year 12 or the WSA group. These differences and their directions corresponded with those for SoB as outlined above. That is, the TEE group also had higher SoB than the other two groups. The TEE group also had higher Behavioural Conduct self-concept scores than the Leave Before Year 12 group but not the WSA group.

The analyses revealed main effects for Gender on five dimensions of self-concept as follows; Athletic Self-Concept, $F(1,173) = 8.28, p < .05$, Physical Appearance, $F(1,173) = 32.25, p < .05$, Romantic Appeal, $F(1,173) = 5.01, p < .05$, Close Friendship, $F(1,173) = 8.13, p < .05$, Global Self-Worth, $F(1,173) = 16.35, p < .05$. Males’ self concept was generally higher. Specifically, it was higher for Athletic Self-Concept, Physical Appearance,
Belonging and Self-Esteem

Romantic Appeal and Global Self-Worth. Whilst females scored higher for Close Friendship. Descriptive statistics for Gender and self-concept are displayed in Table 4.

The only significant interaction between Gender and Intention was for Behavioral Conduct, $F(2, 173) = 4.69$, $p < .05$. Females in the Leave Before Year 12 group had significantly lower Behavioral Conduct self-concept than Males in the TEE group. Whilst Females in the TEE group scored significantly higher than Males in the Leave Before Year 12 group.

Pearson product-moment correlations were conducted between SoB and the nine dimensions of self-concept measured with Harter's (1988), SPPA. Scatterplots indicated that the assumptions of linearity and homoscedasticity were satisfied. Correlations between Total SoB and each dimension of self-concept are reported in Table 5, for the three groups of Intentions. As the relationships between SoB, self-concept and self-esteem were the main focus of this study, the relationships between each self-concept dimension are not displayed. There was a weak to moderate relationship between SoB and all dimensions of self-concept. As anticipated, each dimension of self-concept was also positively and significantly correlated with Global Self-Worth, which represents self-esteem. Therefore there is a linear relationship between SoB and self-concept, and also between self-concept and self-esteem. Total and group correlations between eight dimensions of self-concept and Global Self-Worth are displayed in Table 6.

As group differences had been determined with ANOVA, Pearson product-moment correlations were also carried out independently for each of the three groups of Intention, to articulate the correlations as
recommended by de Vaus (1985). This elaboration was to ascertain how relationships between SoB, self-concept and self-esteem, may have differed for each group.

For the Leave Before Year 12 group, there was a positive, significant relationship between SoB and Scholastic Competence, Social Acceptance, Athletic Competence, Physical Appearance and Global Self-Worth. Generally all SoB relationships were fairly weak with Athletic Competence forming the strongest \( r(178) = .43, p < .01 \). Global Self-Worth formed relationships of moderate strength between Scholastic Competence, Athletic Competence, Job Competence and Behavioral Conduct. The strongest correlations were for Physical Appearance, \( r(178) = .80, p < .01 \) and Romantic Appeal, \( r(178) = .61, p < .01 \). Other dimensions formed weak relationships to Global Self-Worth, or self-esteem except for Close Friendship, which failed to reach significance.

For the WSA group, SoB was more moderately correlated with each dimension of self-concept, except Job Competence and Romantic Appeal, which failed to reach significance. Social Acceptance \( r(178) = .50, p < .01 \) and Global Self-Worth, \( r(178) = .54, p < .01 \) formed the strongest relationships with SoB. Each level of self-concept was also positively and significantly correlated with Global Self-Worth except Behavioural Conduct. Interestingly, Scholastic Competence \( r(178) = .22, p < .05 \), was more weakly correlated with Global Self-Worth, than it was for the other two groups. Relationships were strongest for Physical Appearance, Social Acceptance and Romantic Appeal and Athletic Competence, in that order.

For the TEE group, SoB was positively and significantly correlated with each dimension of self-concept except, Athletic Self-Concept and
Close Friendship. Social Acceptance $r(178) = .50, p < .01$ and Global Self-Worth $r(178) = .54, p < .01$, formed the strongest relationships. The strength of other relationships was lower and similar to the WSA group. However, moderately strong correlations were evident for each self-concept domain with Global Self-Worth, except Athletic Competence and Close Friendship, which were only weakly, related. The strongest relationships were for Physical Appearance $r(178) = .68, p < .01$, and Scholastic Competence $r(178) = .62, p < .01$.

The significant correlations that corresponded across the three groups for SoB and self-concept were, Scholastic Competence, Social Acceptance and Physical Appearance. The strength of the relationships for these, did not vary much between groups although Social Acceptance was stronger in the WSA and TEE groups. The TEE and WSA groups also had corresponding significant relationships for SoB and Behavioural Conduct, Romantic Appeal and Close Friendship. These domains were not significant for the Leaving group. Significant correlations between dimensions of self-concept and Global Self-Worth corresponded across the three groups on most levels. The strongest correlations for the three groups were between Physical Appearance and Global Self-Worth. The TEE group had the strongest correlation between Scholastic Competence and Global Self-Worth (self-esteem).

Discussion

This investigation examined the differences in Sense of Belonging, self-concept and self-esteem amongst students who were not intending to complete secondary schooling, and those who were. The first research question sought to determine differences in SoB, self-concept and self-
esteem between Year 10 students intending to leave school before Year 12 and those who intend staying to complete either a WSA or TEE course in Year 12. It was found the TEE group had the highest SoB as anticipated, and also higher Scholastic self-concept and Global Self-Worth, which represents self-esteem. The hypothesis that there would be a direct and positive relationship between SoB, self-concept and self-esteem was also supported by the results. The last research question asked which dimensions of self-concept are most strongly associated with a sense of belonging? Global Self-Worth formed the strongest relationship, followed by Social Acceptance. Each dimension was related although when these results were elaborated with separate analyses for each group, agreement was limited to three dimensions of self-concept. That is, for those Leaving Before Year 12, doing either a WSA or TEE course, there was a relationship between SoB and Scholastic Competence, Social Acceptance and Physical Appearance, only. This means that one or two groups contributed to the significance on the other dimensions. Each of these results will be discussed fully, in turn.

The TEE group had higher SoB than either of the other two groups. This group represents students who achieve fairly highly at school, since most schools require at least ‘B’ grades in academic subjects, to be eligible to enroll for a TEE course. Therefore, finding this group scored the highest SoB, could be consistent with the theory that achieving highly is rewarded by greater acceptance, respect and approval from significant others and results in greater feelings of belonging (Goodenow, 1993; Harter, 1993, 1996b; Wehlage et al., 1989).

The TEE group also had higher Scholastic Competence self-concept and higher self-esteem (Global Self-Worth). Higher Behavioral Conduct
than those intending to leave, was evident also. These results may be
explained by the findings of Goodenow (1993b), that greater support led to
higher SoB. Harter (1993, 1996b), also found greater support or approval
was related to higher self-esteem. Therefore it may be hypothesised that a
higher achieving student’s journey through school is similar to the
theoretical pathway displayed in Figure 1 on page 53. Based on others
findings it seems reasonable to infer these students feel a sense of belonging
and also believe in their scholastic ability. These feelings may be derived
from approval for their academic endeavour in the form of higher grades
and conceivably from teachers and parents too. Approval can validate self­
concept and increase self-esteem. Each of these underlying processes can
motivate students to be fully engaged in their schoolwork as the benefits
have both extrinsic and intrinsic value.

Individual correlations for each group offers further information about
the differences between them. Relationships between SoB, Scholastic
Competence, Social Acceptance and Global Self-Worth occurred in each
group, although the strength of the relationships varied.

The relationship for Scholastic Competence and SoB was consistently
weak for the three groups, despite TEE students having the highest mean
Scholastic Competence scores. This suggests students’ scholastic perception
of themselves may be only partly related to whether they feel belonging in
the school. However the Global Self-Worth scores which represent self­
esteeem, were more strongly associated with Scholastic Competence. The
strongest relationship existed for the TEE group, followed by the Leaving
group. The WSA group scores formed only a weak relationship. Stronger
relationships for self-esteem and Scholastic Competence may suggest an
evaluative component is more meaningful than a descriptive element in the formation of self-esteem, as was first postulated by James (Harter, 1993). Therefore it may be as Harter (1993, 1996b), put forward, that self-esteem is based on the accuracy of one's scholastic self-concept. Furthermore, a moderately strong relationship between Global Self-Worth and SoB may suggest feelings of belonging will only be affected if students base their self-esteem, on their perceived ability. Although Harter (1996b), did find most students thought scholastic ability was important. In this study, the TEE group had significantly higher scores for scholastic self-concept, self-esteem and belonging and there were strong associations between scholastic self-concept and self-esteem. The combinations of high scores and associations could suggest the TEE group's scholastic self-concept was important to them and their higher self-esteem implies it was matched by their actual ability, which may account for greater feelings of belonging.

The raw means for SoB and self-concept were slightly higher for WSA students, than those leaving before Year 12, but not significantly different. Although, it is interesting that for the WSA group, the relationship between Global Self-Worth and Scholastic Competence was quite weak. This seems to suggest these students' self-esteem is not based on their perceived scholastic ability, yet they intend to stay at school. However the relationships among Social Acceptance, SoB and Global Self-Worth were each of moderate strength for this group. The WSA group also had the strongest relationship between Self-Worth and Athletic Competence, of the three groups. An interpretation of these results may be that WSA students dismissed their scholastic competence as not important to their self-esteem, in the way Harter (1993) has suggested. Instead they may have based it on
the dimensions of Social Acceptance and Athletic Competence, since belonging and self-esteem were both more strongly related to these dimensions. This group may have got their belonging needs met through experiencing recognition and acceptance for participating in sport, and from relationships with their friends and peers. If that were the case it may have contributed to their decision to stay at school.

Another possible explanation may be that of the WSA students who listed a choice in Year 11, 62% said they intended to enroll in a VET program. These are vocational programs that give students generic skills for various occupations, such as fashion design, childcare, aviation and also for entry into Technical and Further Education (TAFE) courses. The availability of these programs may motivate students to stay at school, despite lower feelings of belonging. This inference however, should be drawn with caution, since only half of the WSA students nominated a choice for Year 11. However, it would be interesting to see if students’ feelings changed, once they were participating in these programs. Availability of vocational programs can meet the needs of students who do not have high academic aspirations, by providing them with relevant and meaningful learning that can help direct their future. Catering for students in this way, may be perceived as supportive, and contribute to higher feelings of belonging at school, and in turn lead to higher self-concept and self-esteem.

The intentions of the TEE and WSA groups may tentatively be explained by the results, but what of the last group? Theoretically, it might be that those intending to leave before Year 12, followed the alternative pathway for students who receive poor grades displayed in Figure 1 (p.53),
although this cannot be ascertained since data for students grades was not collected, in this study. However as previously stated, this group of students did have lower mean SoB, Scholastic Competence, Behavioral Conduct and Global Self-Worth scores. Relationships between self-concept and SoB were weakest for this group. The strongest relationships between Global Self-Worth and self-concept were for Physical Appearance, Romantic Appeal and Scholastic Competence in that order. The relationship between Physical Appearance and self-esteem was the strongest of any group, yet mean self-concept scores were approximately equal across groups. This may indicate that while students perceived physical appearance in a similar way, the degree to which they based their self-esteem on their perceptions varied. Although the WSA and TEE groups had fairly strong relationships too. This concurs with Harter’s (1988, 1993), reports that Physical Appearance is consistently associated most strongly with adolescents’ self-esteem. Nonetheless the students in this study who are intending to leave, had the strongest relationships for dimensions not related to school. Although there was also a moderate relationship for Scholastic Competence. Sense of Belonging scores were significantly low for this group and most weakly related to Global Self-Worth. These students had low scholastic self-concept, yet it was still moderately related to self-esteem. This seems to indicate that these students did base their self-esteem on their scholastic ability, which would mean it was important to them. If however this importance was not matched by their actual achievement, it could account for them also having the weakest relationship between self-esteem and belonging. However this pathway can only be inferred. SoB has been related to achievement (Finn, 1993; Goodenow, 1993a,b; Goodenow
& Grady, 1993; Hagborg, 1998; Roeser et al., 1996;), therefore it has been assumed low SoB might contribute to students decision to leave. However this has not been established in this study since assessment data was not collected. This step is recommended for future studies.

Although gender differences were not the main focus of this investigation, it was nevertheless important to determine if they made a significant contribution to the findings. Goodenow (1993a), reported higher SoB for females than males, however no differences were detected in this investigation. Male self-concept scores were generally higher. Boys had higher athletic, physical and romantic self-concept and also higher self-esteem than girls. For girls only close friendship self-concept was higher than boys. These findings appear to be consistent with different developmental pathways for adolescent girls and boys (Crain, 1996; Harter, 1996b).

Determining a relationship between SoB, self-concept and self-esteem is important. This is because whilst SoB has largely been established as a fundamental psychological and social need (Baumeister & Leary, 1995;Connell & Wellborn 1991; Finn, 1993; Goodenow, 1993a, 1993b;Goodenow & Grady, 1993; Hymel, et al., 1996; Maslow, 1970; Ryan &Deci, 2000), the negative consequences that can result when this need is not met, are mainly conjecture (Baumeister & Leary, 1995). Although SoB has been associated with school dropout rates (Finn, 1993; Goodenow, 1993a;Wehlage, 1989), this has not been empirically demonstrated and the underlying psychological processes that contribute to dropout, remain largely undetermined. In this study low SoB was associated with lower self-concept and self-esteem scores. This may provide some empirical evidence
of the underlying processes that can contribute to students decision to leave school early.

The positive direction of relationships between SoB, self-concept and self-esteem established in this study offers new understanding of how these constructs may be formed. A sense of belonging has been shown to evolve from perceived support or respect and acceptance from others (Battistich, et al, 1999; Goodenow, 1993b; Roeser et al., 1996; Wehlage, 1989) however support or approval is conditional (Harter, 1993, 1996b). In the classroom approval can be conditional on getting good grades. For the majority of students for whom Scholastic Competence is important (Harter, 1996b), approval is internalised, forming their self-concept about their ability and consequently their worth or self-esteem. In this way achievement or grades can become internalised and equated with self-worth (Covington, 2000). In this study, the relationship between SoB, self-concept and self-esteem followed the expected direction for the three groups, although the strength varied. Generally the associations were strongest for the TEE group and weakest for the group who were leaving. If these results are an indication of students’ perceptions and feelings in school, it could be hypothesised students who intend to leave school early do so because they feel alienated, as theorists have suggested (Finn, 1993; Goodenow, 1993a; Wehlage et al., 1989)

Limitations and Future Directions

While the results of this study have yielded some important information, there are nevertheless some limitations. One was the length and repetitious nature of the SPPA (Harter, 1988). Most of the missing data was for this measure and at the time of collection, students complained that
it seemed to be asking the same questions over and over. This may relate to Bracken and Keith's (1996), criticism of the 'homogenous nature' of the scale items, when discussing the construct validity of the SPPA. Students also complained about the length of the SPPA. In future research, it might be more prudent to only include dimensions that are most pertinent to school. All dimensions were included in this study because of its exploratory nature. However two dimensions that did not appear to contribute particularly relevant information were, Job Competence and Romantic Appeal.

This study was conducted in low SES areas because in previous research this factor has been associated with students most likely to leave (Carnahan, 1994; Finn, 1993; Janosz, et al., 1997; Wehlage et al., 1989). Whilst social and personal factors outside the school vary for each individual, the curriculum and associated policies and ethos are uniform across most government schools within Western Australia. Therefore in future studies, more schools need to be included from every level of the social stratum, to determine broad range effects and differences of SoB, self-concept and self-esteem. Also as this study was preliminary in nature only two schools were included in the survey, however further support of these findings can only be obtained by replication within a larger range of schools.

Since this study was a cross sectional design, reliable causal inferences cannot be made. In future, longitudinal studies could provide valuable information about the development of the constructs of self-concept, self-esteem and SoB. It could be particularly useful to compare these constructs in primary school and then follow up in high school, as
others have reported some differences (Harter, 1996b; Voelkl, 1997). Further information about the effects of SoB, self-concept and self-esteem could also be obtained with longitudinal studies, to determine whether students intentions match their actual destinations, and how SoB and self-esteem relate to these events. Including academic assessment data, to determine how it relates to students intentions could also extend the findings from this study. Comparisons of Year 11, TEE students with those in vocational programs could also contribute more knowledge about the value of offering vocational courses, instead of just academic subjects.

Fortunately, in Western Australia the Education Department has become aware of the changing needs of students, entering the new millennium. The main objective of the recently formed Curriculum Council is to focus on the best ways to address these needs. A review by the Curriculum Council (1999) places particular emphasis on post-compulsory education and new directions include addressing the breadth and depth of the curriculum. The standards or specified levels of achievement for TEE, WSA and VET subjects are also under review, as are current methods of assessment.

New methods of assessment presently being implemented in all schools, are called outcome statements (Curriculum Council, 2000). These are described as ‘progress maps’ and indicate the degree of knowledge and skills a student has demonstrated in regard to each of the main learning areas. This type of assessment focuses more on improvement, effort and mastery of tasks and is designed to encourage and reinforce positive learning attitudes. Although, if this assessment is converted to a traditional grade at the end of each semester, its benefits may be minimised. There also
needs to be an emphasis on schools as caring communities where all students feel accepted and valued, regardless of academic outcomes (Battistich, et al., 1999). Still, the types of initiatives being introduced by the Curriculum Council demonstrate a willingness to change and offer students many advantages for the future. Therefore there is hope that all students entering the new millennium will experience education in a positive way that will encourage life long learning and enhance their psychosocial well being.

Notwithstanding the limitations, this study contributes to an understanding of the area in important ways. It has demonstrated significant differences in SoB, self-concept and self-esteem between students intending to complete their secondary schooling and those who are not. It has also shown SoB is associated with self-concept and self-esteem and may therefore contribute to the development of these psychological constructs. Further, higher SoB seems to be associated with higher achievement, as represented by the TEE group. Therefore it seems reasonable to infer there was also an association between the intention to leave school, and lower measures of belonging and self-esteem. School factors such as a lack of support, a narrow curriculum and traditional forms of assessment have been recognised as crucial in the retention and psychological development of students. However in Western Australia these issues are being addressed by broadening the curriculum to include more vocational subjects and also by initiating new forms of assessment. If these are accompanied by addressing the need for belonging, then students may feel more inclined to complete their secondary schooling. They will also be able to work toward their future goals in ways that reinforce their value and worth, regardless of
scholastic ability.
References

Australian Bureau of Statistics. (1999). Schools Australia. 4221.0


Covington, M.V. (2000). Goal theory, motivation, and school achievement:


Education Department of Western Australia. (2000). *Summary Statistics for Western Australian Schools*.


Janosz, M., LeBlanc, M., Bouleree B., & Tremblay, R.E. (1997). Disentangling the weight of school dropout predictors: A test on two


Table 1

Mean Sense of Belonging for Three Groups of Intention; Leave Before Year 12, do a WSA or TEE Course.

<table>
<thead>
<tr>
<th>Sense of Belonging</th>
<th>Before Yr 12</th>
<th>WSA</th>
<th>TEE</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>n</td>
<td>M</td>
</tr>
<tr>
<td>Female</td>
<td>2.76</td>
<td>.52</td>
<td>22</td>
<td>3.17</td>
</tr>
<tr>
<td>Male</td>
<td>3.11</td>
<td>.59</td>
<td>31</td>
<td>3.08</td>
</tr>
<tr>
<td>Total</td>
<td>2.97</td>
<td>.59</td>
<td>53</td>
<td>3.11</td>
</tr>
</tbody>
</table>
Table 2

Factorial ANOVA (Intention x Gender) Main Effects for Sense of Belonging, Self-Worth and Eight Dimensions of Self-Concept.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Effect</th>
<th>df</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sense of Belonging</td>
<td>Gender</td>
<td>1</td>
<td>1.30</td>
<td>.26</td>
</tr>
<tr>
<td></td>
<td>Intention</td>
<td>2</td>
<td>10.49</td>
<td>.00*</td>
</tr>
<tr>
<td>Total df</td>
<td></td>
<td></td>
<td>175</td>
<td></td>
</tr>
<tr>
<td>Scholastic</td>
<td>Gender</td>
<td>1</td>
<td>1.20</td>
<td>.30</td>
</tr>
<tr>
<td>Competence</td>
<td>Intention</td>
<td>2</td>
<td>15.30</td>
<td>.00*</td>
</tr>
<tr>
<td>Social Acceptance</td>
<td>Gender</td>
<td>1</td>
<td>3.39</td>
<td>.07</td>
</tr>
<tr>
<td></td>
<td>Intention</td>
<td>2</td>
<td>2.27</td>
<td>.11</td>
</tr>
<tr>
<td>Athletic</td>
<td>Gender</td>
<td>1</td>
<td>8.29</td>
<td>.01*</td>
</tr>
<tr>
<td>Self-Concept</td>
<td>Intention</td>
<td>2</td>
<td>2.56</td>
<td>.08</td>
</tr>
<tr>
<td>Physical Appearance</td>
<td>Gender</td>
<td>1</td>
<td>32.25</td>
<td>.00*</td>
</tr>
<tr>
<td></td>
<td>Intention</td>
<td>2</td>
<td>1.76</td>
<td>.18</td>
</tr>
<tr>
<td>Job Competence</td>
<td>Gender</td>
<td>1</td>
<td>3.22</td>
<td>.07</td>
</tr>
<tr>
<td></td>
<td>Intention</td>
<td>2</td>
<td>1.59</td>
<td>.21</td>
</tr>
<tr>
<td>Romantic Appeal</td>
<td>Gender</td>
<td>1</td>
<td>5.01</td>
<td>.03*</td>
</tr>
<tr>
<td></td>
<td>Intention</td>
<td>2</td>
<td>1.33</td>
<td>.27</td>
</tr>
<tr>
<td>Behavioural Conduct</td>
<td>Gender</td>
<td>1</td>
<td>.98</td>
<td>.32</td>
</tr>
<tr>
<td></td>
<td>Intention</td>
<td>2</td>
<td>11.17</td>
<td>.00*</td>
</tr>
<tr>
<td></td>
<td>Gender x Intention</td>
<td>2</td>
<td>4.69</td>
<td>.01*</td>
</tr>
<tr>
<td>Close Friendship</td>
<td>Gender</td>
<td>1</td>
<td>8.13</td>
<td>.01*</td>
</tr>
<tr>
<td></td>
<td>Intention</td>
<td>2</td>
<td>1.22</td>
<td>.30</td>
</tr>
<tr>
<td>Global Self-Worth</td>
<td>Gender</td>
<td>1</td>
<td>16.35</td>
<td>.00*</td>
</tr>
<tr>
<td></td>
<td>Intention</td>
<td>2</td>
<td>8.25</td>
<td>.00*</td>
</tr>
<tr>
<td>Total df</td>
<td></td>
<td></td>
<td>173</td>
<td></td>
</tr>
</tbody>
</table>

Note: * = p < .05
<table>
<thead>
<tr>
<th>Dimension</th>
<th>Leave Before Year 12</th>
<th>WSA</th>
<th>TEE</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Scholastic Competence</td>
<td>2.45</td>
<td>.53</td>
<td>2.51</td>
<td>.55</td>
</tr>
<tr>
<td>Social Acceptance</td>
<td>2.99</td>
<td>.64</td>
<td>2.92</td>
<td>.60</td>
</tr>
<tr>
<td>Athletic Self-Concept</td>
<td>2.64</td>
<td>.66</td>
<td>2.48</td>
<td>.85</td>
</tr>
<tr>
<td>Physical Appearance</td>
<td>2.40</td>
<td>.76</td>
<td>2.33</td>
<td>.73</td>
</tr>
<tr>
<td>Job Competence</td>
<td>3.01</td>
<td>.64</td>
<td>2.82</td>
<td>.63</td>
</tr>
<tr>
<td>Romantic Appeal</td>
<td>2.54</td>
<td>.59</td>
<td>2.34</td>
<td>.68</td>
</tr>
<tr>
<td>Behavioral Conduct</td>
<td>2.42</td>
<td>.58</td>
<td>2.63</td>
<td>.56</td>
</tr>
<tr>
<td>Close Friendship</td>
<td>3.19</td>
<td>.69</td>
<td>3.08</td>
<td>.75</td>
</tr>
<tr>
<td>Global Self-Worth</td>
<td>2.72</td>
<td>.67</td>
<td>2.69</td>
<td>.59</td>
</tr>
</tbody>
</table>

Note: Leave Before Year 12, n = 50; Do a WSA Course, n = 66; Do a TEE Course, n = 64
Table 4

Mean SPPA Scores for Gender on Nine Dimensions of Self-Concept.

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Female</th>
<th></th>
<th></th>
<th>Male</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td></td>
</tr>
<tr>
<td>Scholastic Competence</td>
<td>2.27</td>
<td>.58</td>
<td>2.68</td>
<td>.60</td>
<td></td>
</tr>
<tr>
<td>Social Acceptance</td>
<td>2.93</td>
<td>.70</td>
<td>3.10</td>
<td>.52</td>
<td></td>
</tr>
<tr>
<td>Athletic Self-Concept</td>
<td>2.45</td>
<td>.83</td>
<td>2.76</td>
<td>.81</td>
<td></td>
</tr>
<tr>
<td>Physical Appearance</td>
<td>2.07</td>
<td>.76</td>
<td>2.68</td>
<td>.75</td>
<td></td>
</tr>
<tr>
<td>Job Competence</td>
<td>2.85</td>
<td>.72</td>
<td>3.00</td>
<td>.54</td>
<td></td>
</tr>
<tr>
<td>Romantic Appeal</td>
<td>2.28</td>
<td>.69</td>
<td>2.51</td>
<td>.62</td>
<td></td>
</tr>
<tr>
<td>Behavioural Conduct</td>
<td>2.67</td>
<td>.61</td>
<td>2.69</td>
<td>.59</td>
<td></td>
</tr>
<tr>
<td>Close Friendship</td>
<td>3.37</td>
<td>.69</td>
<td>3.05</td>
<td>.66</td>
<td></td>
</tr>
<tr>
<td>Global Self-Worth</td>
<td>2.66</td>
<td>.73</td>
<td>2.97</td>
<td>.53</td>
<td></td>
</tr>
</tbody>
</table>

Note: Female; n = 84  
Male; n = 95
### Table 5

**Correlations for Sense of Belonging and Self-Concept for Three Groups of Intention**

<table>
<thead>
<tr>
<th>Subscale</th>
<th>SoB Total</th>
<th>SoB Leave</th>
<th>SoB WSA</th>
<th>SoB TEE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scholastic Competence</td>
<td>.40**</td>
<td>.33**</td>
<td>.35*</td>
<td>.31**</td>
</tr>
<tr>
<td>Social Acceptance</td>
<td>.43**</td>
<td>.25*</td>
<td>.50**</td>
<td>.50**</td>
</tr>
<tr>
<td>Athletic Competence</td>
<td>.30**</td>
<td>.43**</td>
<td>.36**</td>
<td>.10</td>
</tr>
<tr>
<td>Physical Appearance</td>
<td>.29**</td>
<td>.28*</td>
<td>.25*</td>
<td>.31**</td>
</tr>
<tr>
<td>Job Competence</td>
<td>.13*</td>
<td>.09</td>
<td>.09</td>
<td>.24*</td>
</tr>
<tr>
<td>Romantic Appeal</td>
<td>.17*</td>
<td>.14</td>
<td>.20</td>
<td>.26*</td>
</tr>
<tr>
<td>Behavioral Conduct</td>
<td>.37**</td>
<td>.17</td>
<td>.36**</td>
<td>.36**</td>
</tr>
<tr>
<td>Close Friendship</td>
<td>.32**</td>
<td>.23</td>
<td>.41**</td>
<td>.21</td>
</tr>
<tr>
<td>Global Self-Worth</td>
<td>.50**</td>
<td>.28*</td>
<td>.54**</td>
<td>.54**</td>
</tr>
</tbody>
</table>

Note: \( n = 180 \)

** Correlation is significant at the .01 level (1-tailed)
* Correlation is significant at the .05 level (1-tailed)
Table 6

Correlations for Self-Worth and Eight Dimension of Self-Concept for Three Groups of Intention

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Self-Worth Total</th>
<th>Self-Worth Leave</th>
<th>Self-Worth WSA</th>
<th>Self-Worth TEE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scholastic Competence</td>
<td>.49**</td>
<td>.49**</td>
<td>.22*</td>
<td>.62**</td>
</tr>
<tr>
<td>Social Acceptance</td>
<td>.50**</td>
<td>.33**</td>
<td>.57**</td>
<td>.55**</td>
</tr>
<tr>
<td>Athletic Competence</td>
<td>.34**</td>
<td>.30*</td>
<td>.45**</td>
<td>.21</td>
</tr>
<tr>
<td>Physical Appearance</td>
<td>.71**</td>
<td>.80**</td>
<td>.69**</td>
<td>.68**</td>
</tr>
<tr>
<td>Job Competence</td>
<td>.38**</td>
<td>.42**</td>
<td>.31**</td>
<td>.41**</td>
</tr>
<tr>
<td>Romantic Appeal</td>
<td>.45**</td>
<td>.61**</td>
<td>.47**</td>
<td>.43**</td>
</tr>
<tr>
<td>Behavioral Conduct</td>
<td>.39**</td>
<td>.42**</td>
<td>.20</td>
<td>.42**</td>
</tr>
<tr>
<td>Close Friendship</td>
<td>.24**</td>
<td>.07</td>
<td>.28*</td>
<td>.27*</td>
</tr>
</tbody>
</table>

Note: \( n = 180 \)

** Correlation is significant at the .01 level (1-tailed)
* Correlation is significant at the .05 level (1-tailed)
Appendix A

The Psychological Sense of School Membership (PSSM) Scale

1. I feel like a real part of (name of school).
2. People here notice when I’m good at something.
3. It is hard for people like me to be accepted here. *(reversed)*
4. Other students in this school take my opinions seriously.
5. Most teachers at (name of school) are interested in me.
6. Sometimes I feel as if I don’t belong here. *(reversed)*
7. There’s at least one teacher or other adult in this school I can talk to if I have a problem.
8. People at this school are friendly to me.
9. Teachers here are not interested in people like me. *(reversed)*
10. I am included in lots of activities at (name of school).
11. I am treated with as much respect as other students.
12. I feel very different from most other students here. *(reversed)*
13. I can really be myself at this school.
14. The teachers here respect me.
15. People here know I can do good work.
16. I wish I were in a different school. *(reversed)*
17. I feel proud of belonging to (name of school).
18. Other students here like me the way I am.